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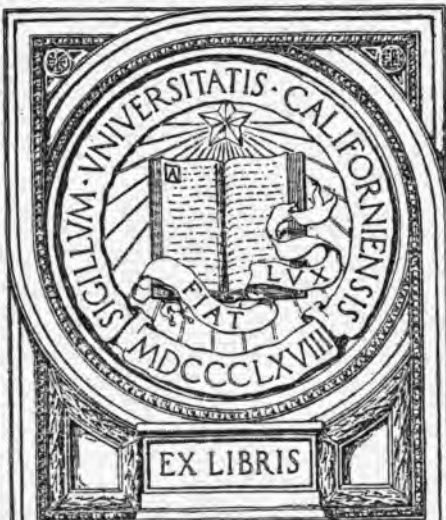
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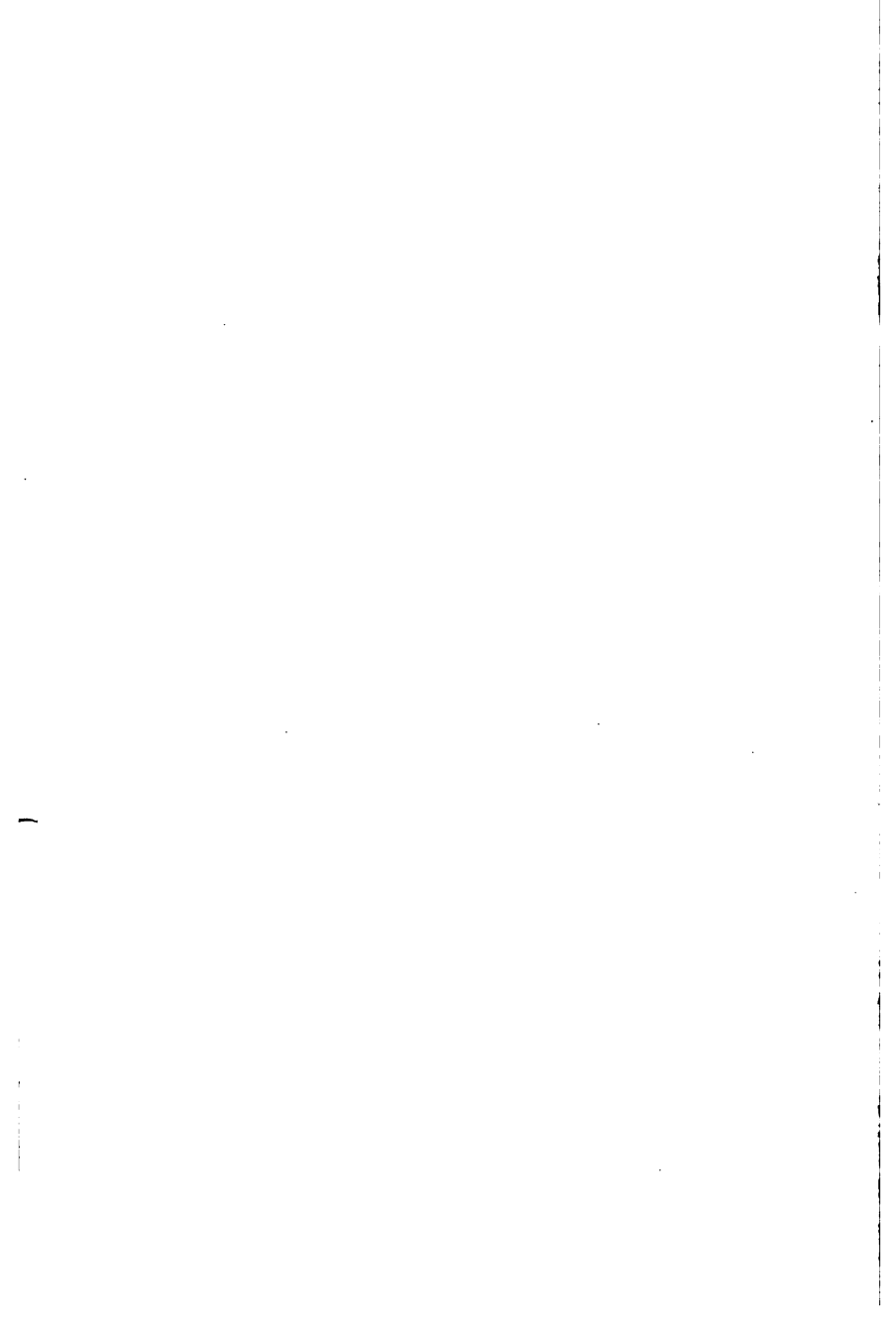


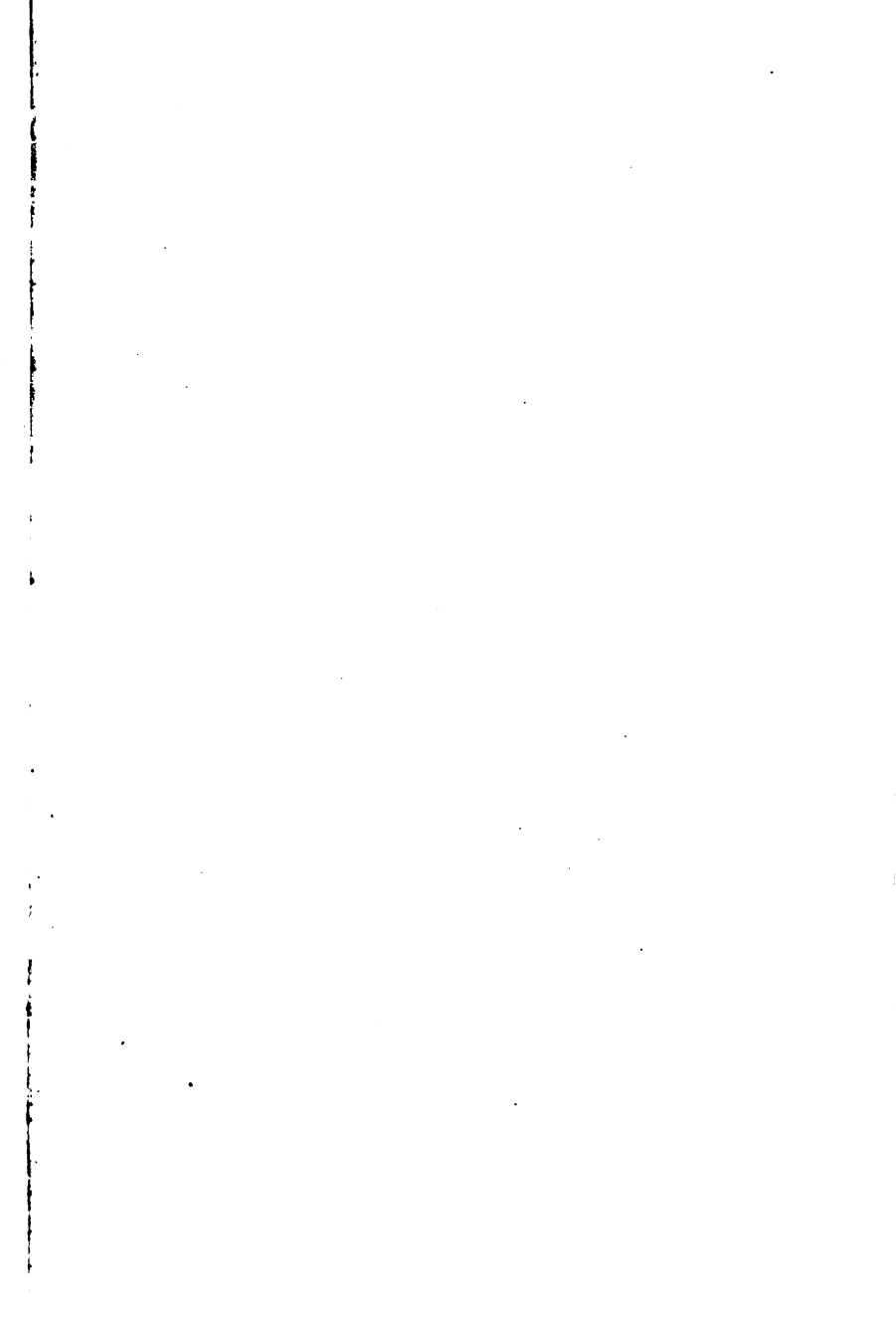
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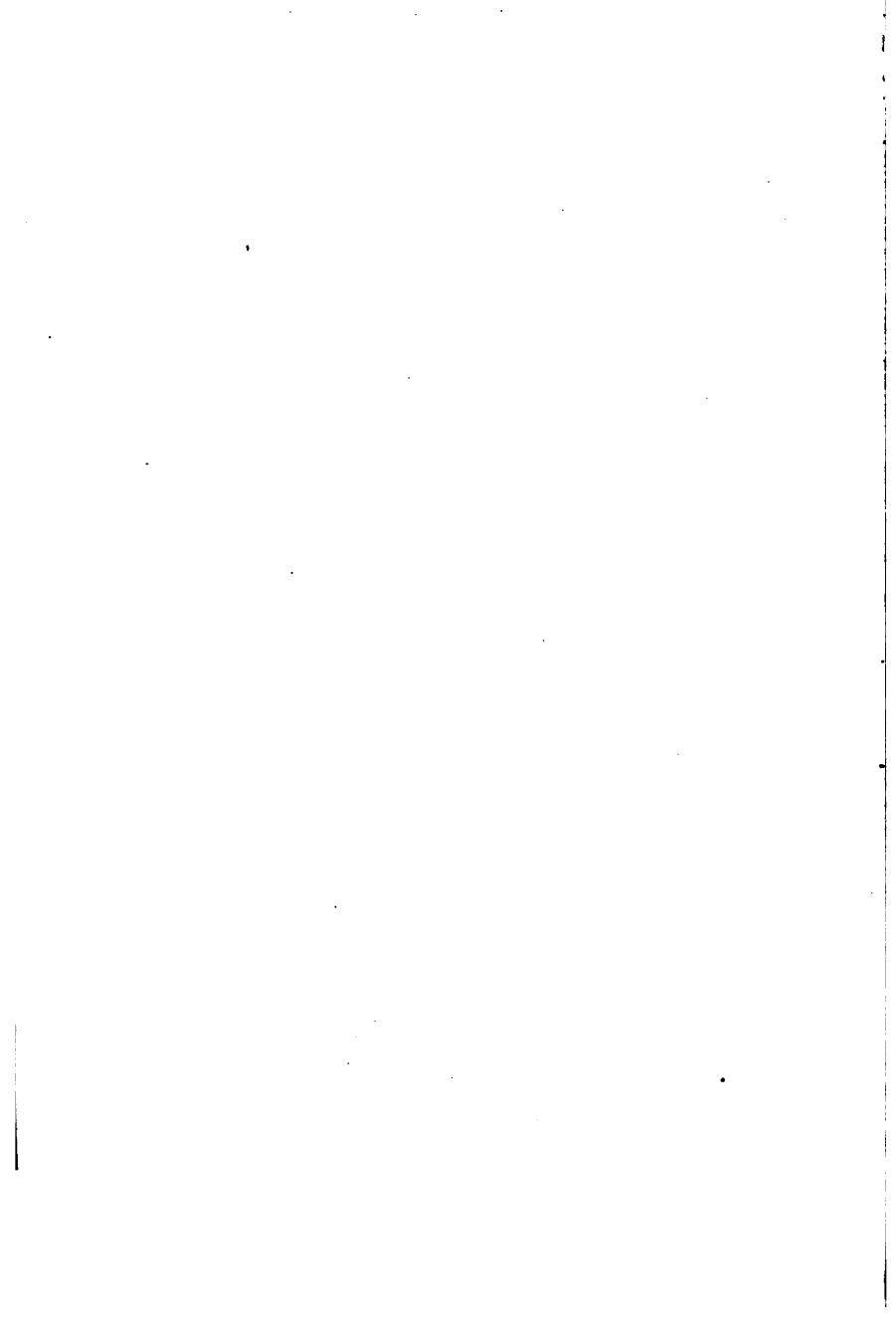


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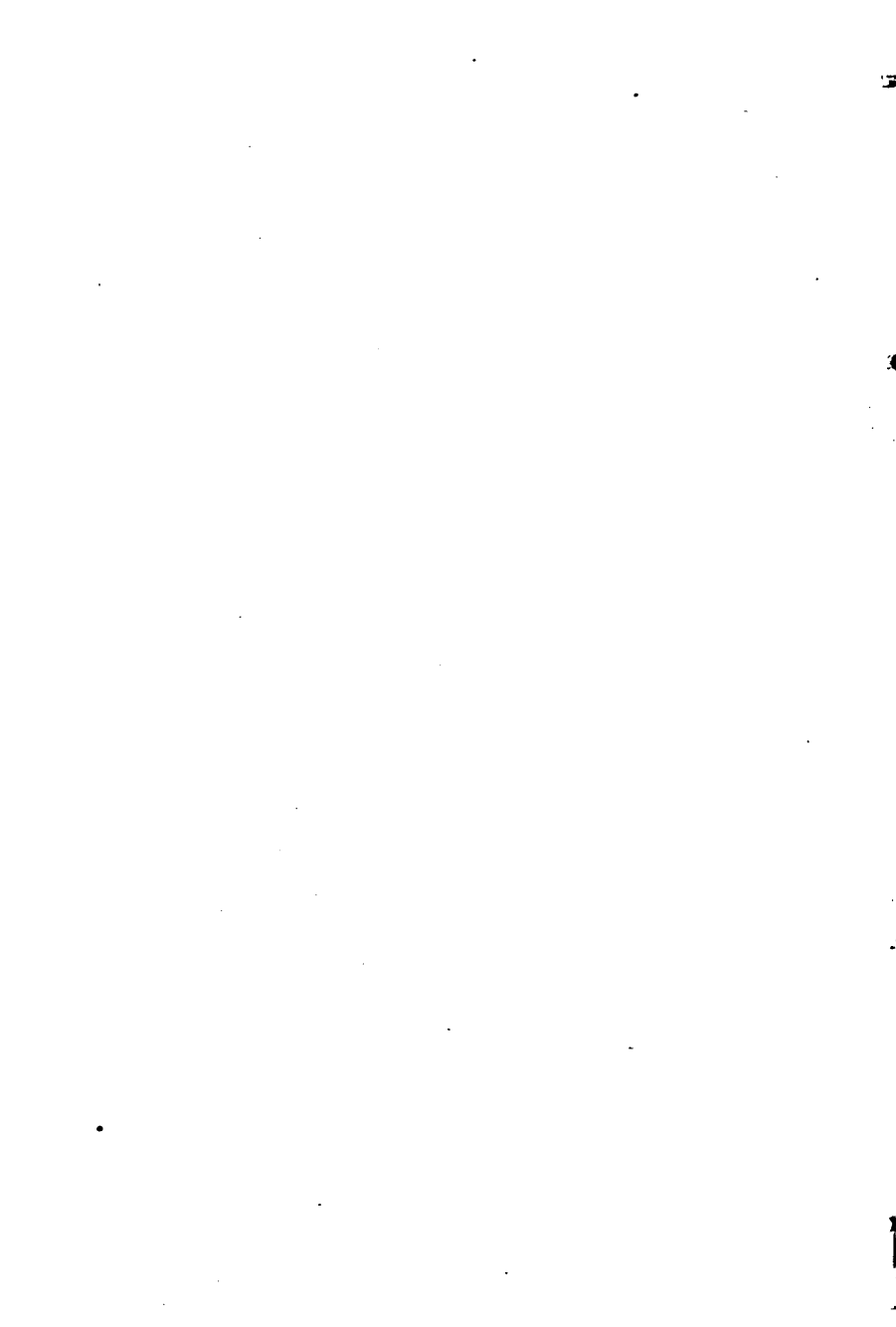


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OF
EDUCATION

BY

F. V. N. PAINTER, A. M.

PROFESSOR OF MODERN LANGUAGES AND LITERATURE IN ROANOKE COLLEGE

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22

DEDICATED
TO
The Memory of my Father.

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EDITOR'S PREFACE.

THE following work by Prof. Painter takes up the subject from the standpoint of the history of civilization. The educational ideals that have prevailed have been derived from the principles that have controlled nations and religions. Each State has evolved a system of education in conformity with the fundamental idea of its civilization. It may or may not have had a system of schools, but it has possessed instrumentalities for education in the family, civil society, and religious ceremonial, besides its own direct discipline through the laws and their administration and through its public service, civil and military. In religion, whether Christian or "heathen," there is implied a definite fundamental view of the world which is referred to in all concrete relations, and by this there is given a sort of systematic unity to the details of life. The first object of parental government is to train the child into habits of conformity to the current religious

view. The government seeks to enforce an observance of regulations ~~that~~ establish social relations founded on the view of the world furnished in religion.

We learn, therefore, to look for the explanation of the system of education in the national ideal as revealed in its religion, art, social customs, and form of government. A new phase of civilization demands a new system of education. The school, originally organized as an instrumentality of the Church, is needed to re-enforce the other institutions, and accordingly in modern times gets expansion and modification for this object. It is in this study of the civilization as a whole that we learn to comprehend the organization of the schools of a country.

The attention of the reader is called, first, to the broad contrast between the spirit of education as it existed in Asia and that in Europe. Subjection to authority is the principle on which most stress is laid in the former. The development of the individual seems to be the constantly growing tendency in the latter, and especially in its colonies. Absolute rulers, castes, parental government, and ethical codes, form the chief themes of interest in Oriental education. Personal adventure, its celebration in works of art, the growth of constitutional forms of government that protect the individual from the substantial might of the ruling authority, free thought, its organization into science—these are the features that attract us in the civilization

of the Occident, and which explain its educational systems.

Inasmuch as the element of authority continues throughout all history as a necessary strand of civilization, it follows that Oriental civilization has important lessons for all people, even the most democratic. The net result of the life of the race must be summed up and given to the child, so that he shall be saved from repeating the errors that had to be lived through before the wisdom expressed by the ethical code could be generalized. Implicit obedience has to be the first lesson for the child. How he shall gradually become endowed with self-control, and finally have the free management of all his affairs, is the further problem of the educational system.

After the reader has studied the spirit of the Asiatic systems, he will find his interest in fixing as clearly as possible the spirit of Christianity before his mind, as it is portrayed in the third chapter of this book. The influence of such an idea as that of the Divine-human God condescending to assume the sorrows and trials of mortal life, all for the sake of the elevation of individual souls, the humblest and weakest as well as the mightiest and most exalted, is potent to transform civilization. That the divine history should be that of infinite tenderness and consideration for the individual, even in his imperfections, acts as a permanent cause to affect the relation of the directing and

controlling powers in human society to the masses beneath them. The whole policy of the institutions of civilization—family, state, church—becomes more and more one of tender nurture and development of individuality as the highest object to be sought by humanity.

In the fourth chapter, Prof. Painter has traced the process of fixing the course of the new civilization, just as in the third chapter the chief theme is the reaction against the old forms of heathen education that still survived. After the Church has become firmly established politically and doctrinally, there arises the struggle within it of the two tendencies represented, on the one hand, by the so-called "humanist" direction which lays chief stress on language-studies, and puts forward the mastery of Latin and Greek as the propædæutics of all genuine culture; and, by the naturalism on the other, that insists upon the study of Nature and experimental science as the true road to culture.

In the struggle between the study of the "humanities" and the study of the "moderns" (or science, modern languages, modern literature, and history), we have reached the process that still goes on in our own day unadjusted by the discovery of a common ground that conserves the merits of both tendencies. In Chinese education, with its exclusive training of the memory, in the study of Latin and Greek among modern European nations, and, indeed, in such trivial matters

as the study of English spelling, with its lack of consistency and its strain on the mechanical memory, we see the same educational effects obtained. Memory is the faculty that subordinates the present under the past, and its extensive training develops a habit of mind that holds by what is prescribed, and recoils from the new and untried. In short, the educational curriculum that lays great stress on memorizing produces a class of conservative people. On the other hand, the studies that develop original powers of observation, and especially a scientific mind, devoted to Nature and neglecting human history, produces a radical, not to say revolutionizing, tendency. It must be obvious that true progress demands both tendencies, held in equilibrium.

The study of the wisdom of the race, the acceptance of the heritage of the past life of the race, is essential to save the new generation from repeating all the steps traveled on the way hitherto. This necessitates the grounding of education in a study of the humanities. On the other hand, if this load of prescription is not to be a millstone that crushes out all spontaneity from the rising generation, there must be a counter-movement whose principle is the scientific spirit, approaching the world of Nature and the world of institutions with the free attitude of science and individual investigation, which accepts only the results that can be demonstrated or verified by its own activity, and enjoys therefore a feeling of self-recognition in its acquisitions. In sci-

ence, man is doubly active: on the one hand, seizing and inventorying the particular fact or event; on the other hand, subsuming it under a universal principle that involves causal energy and a law of action. The act of subsumption gives the mind special gratification because it feels set free from the limited instance and elevated to the realm of principle, wherein it sees the energy that creates all instances, and contains them all potentially within itself. Hence, the spirit of revolution that is gaining so powerful a hold of society in the most recent times. The spirit of science is contagious, and impels toward complete emancipation from the past. But science has made comparatively little progress in the social and political departments, and, besides this, no one is born with science, nor is it possible for one to attain it in early youth. Hence, it is necessary to retain the prescriptive element in education, and to insist upon implicit obedience to prescribed rule at first. There must be a gradual transition over to self-government and free scientific investigation.

W. T. HARRIS.

CONCORD, MASS., *April, 1886.*

AUTHOR'S PREFACE.

It was in the library of the University of Bonn, nearly four years ago, as I sat before an alcove of educational works and leisurely examined the admirable histories by Raumer and Karl Schmidt, that the thought and purpose of preparing this work were first conceived. In view of the poverty of our literature in educational history, it seemed to me that such a work, by exhibiting the pedagogical principles, labors, and progress of the past, might be helpful to teachers in America.

The history of education, viewed from the standpoint of the philosophy of history, has been traced in its relations with the social, political, and religious conditions of each country. While the results of French and German scholarship in this field have been utilized, the original sources of information whenever accessible have been consulted. As far as was consistent with the limits of this volume, the great teachers of all ages have

been allowed to speak for themselves—a method that appeared more satisfactory than to paraphrase or epitomize their views.

Avoiding such matters of detail as serve only to confuse and oppress the memory, I have endeavored to present clearly the leading characteristics of each period, and the labors and distinctive principles of prominent educators. Considerable prominence has been given to Comenius, Pestalozzi, Froebel, and other educational reformers, who laid the foundations of the scientific methods now coming into general use. In support or illustration of various statements, recognized authorities have been permitted to speak freely.

In preparing this history my position has been, as I believe, that of conservative progress. While what is valuable in educational theory and practice is to be retained, and novelties are to be subjected to rigid scrutiny, it does not seem wise, in view of the fact that the science of education is yet incomplete, to reject summarily all changes and reforms as unnecessary and hurtful innovations. In the sphere of higher education I have not allied myself to either the humanists or the realists, believing that the truth lies between these two extremes. In every department of education I have been able to discover progress, and it is my confident hope that the agitations of the present will issue in a system more nearly perfect than any yet devised.

I have frequently consulted Paroz's "*Histoire*

Universelle de la Pédagogie," Dittes's "*Geschichte der Erziehung*," and Raumer's "*Geschichte der Pädagogik*"; but my greatest obligation is due to Karl Schmidt's "*Geschichte der Pädagogik*," which is probably the ablest work that has yet been written on educational history. From these works, as well as from other French and German authors, a number of valuable passages have been translated. To President Julius D. Dreher, of Roanoke College, who read this work, both in manuscript and in proof, special acknowledgments are due for valuable suggestions.

F. V. N. P.

SALEM, VIRGINIA, April 12, 1886.

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HISTORY OF EDUCATION.

INTRODUCTION.

THE principles which should control educational methods are to be sought in human nature. This truth, which long remained unnoticed or inoperative, has been emphasized by the educational reformers of modern times. "Everything should be done in the order of nature" is one of the maxims of Comenius. Pestalozzi has beautifully said: "Sound education stands before me symbolized by a tree planted near fertilizing waters. A little seed, which contains the design of the tree, its form and proportions, is placed in the soil. See how it germinates and expands into trunk, branches, leaves, flowers, and fruit! The whole tree is an uninterrupted chain of organic parts, the plan of which existed in its seed and root. Man is similar to the tree. In the newborn child are hidden those faculties which are to unfold during life. The individual and separate organs of his being form themselves gradually into an harmonic whole, and build up humanity in the image of God."

The various faculties or capacities which await development in the child are classed as physical, mental, and moral. To meet the ends of life, the body must

grow, the mind be developed, and the moral nature trained. These powers, though at first existing in a germinal condition, contain within themselves large possibilities and a strong impulse toward development. The helpless infant may become a Newton. The germinal powers start spontaneously into activity; the limbs become restlessly active, the senses open to objects of the external world, and cognition has its beginning. This growth or development, which gradually transforms childhood into youth, and youth into manhood, goes on according to definite laws, and may be sadly thwarted by neglect, or greatly promoted by judicious care.

During a considerable period of his early life man is helpless and ignorant; he is without the strength and knowledge necessary to maintain an independent existence. It is this fact that renders education a necessity. The processes of physical and mental growth must be assisted and directed during the formative periods of childhood and youth. This is the function of education. Without its fostering care, no generation can be adequately fitted for the duties of life and the achievement of a worthy destiny.

The end of education is complete human development. This is attained by leading the several parts of man's nature to a harmonious realization of their highest possibilities. The finished result is a noble manhood, whose highest exemplification, the ideal of all culture, is Christ. The elements of this manhood are a healthy body, a clear and well-informed intellect, sensibilities quickly susceptible to every right feeling, and a steady will whose volitions are determined by reason and an enlightened conscience.

In support of this conception of education, Prof. Huxley has strikingly said: "That man, I think, has had a liberal education who has been so trained in his youth that his body is the ready servant of his will, and does with ease and pleasure all the work that, as a mechanism, it is capable of; whose intellect is a clear, cold logic-engine, with all its parts of equal strength, and in smooth working order; ready, like a steam-engine, to be turned to any kind of work, and spin the gossamers as well as forge the anchors of the mind; whose mind is stored with a knowledge of the great and fundamental truths of Nature, and of the laws of her operations; one who, no stunted ascetic, is full of life and fire, but whose passions are trained to come to heel by a vigorous will, the servant of a tender conscience; who has learned to love all beauty, whether of nature or art, to hate all vileness, and to respect others as himself."

Thus, in its essential nature, education aims at developing a noble type of manhood; but it has also an external relation. Man has various labors and duties to perform in the world, which require special training, and a wide range of knowledge. Childhood and youth are the periods of preparation. Hence, it is clear that education, both in its subjects and methods of instruction, should have some reference to the demands of practical life. Human development should be combined with practical wisdom; the school should be the natural introduction into active life. This is the view of Milton, who has said, "I call a complete and generous education that which fits a man to perform justly, skillfully, and magnanimously all the offices, both private

and public, of peace and war." Herbert Spencer also has presented the same view very forcibly. "How to live," he says, "that is the essential question for us. Not how to live in the mere material sense only, but in the widest sense. The general problem which comprehends every special problem is the right ruling of conduct in all directions under all circumstances. In what way to treat the body; in what way to treat the mind; in what way to manage our affairs; in what way to bring up a family; in what way to behave as a citizen; in what way to utilize all those sources of happiness which Nature supplies; how to use all our faculties to the greatest advantage of ourselves and others; how to live completely. And this being the great thing needful for us to learn, is, by consequence, the great thing which education has to teach. To prepare us for complete living is the function which education has to discharge; and the only rational mode of judging of any educational course is to judge in what degree it discharges such function."

There are two elements, logically distinguishable but practically inseparable, entering into education. These are development and the acquisition of knowledge. Without development, the individual lacks strength to grapple with the problems of life; and without knowledge, he remains a cipher in society. The great law underlying physical and mental development is self-activity. Every truly educated man is self-made. The various functions of the mind, whether perceiving, feeling, judging, or willing, must for a long period be called into frequent exercise in connection with objects, facts, relations, and truths, in order to become active, obe-

dient, and strong. The basis of this activity is knowledge, which is as necessary for the development of the mind as food is for the growth of the body. "As food is indispensable to physical growth," says Johonnot, "so without knowledge the mind can not grow. While the mind, from the first, possesses all the germs of mental power, it is the appropriation of knowledge alone that converts its latent and apparently passive capacities into active capabilities." Education is not creative; it can not give what Nature has withheld. It is limited by the pupil's individuality, which it can ennoble, but not radically change.

In some form or other, education is as old as our race. According to Holy Writ, the first human pair were the subjects of divine tuition. Among all peoples, barbarous as well as civilized, each generation has received a special training for its subsequent career. Where the form of civilization has been low, education has been narrow and defective. Uncivilized communities do scarcely more than strengthen the body and cultivate the senses. Among no two nations of antiquity have the theory and practice of education been the same. It has varied with the different social, political, and religious conditions of the people and the physical characteristics of the country. But, however varied or imperfect its form, education has existed among all nations.

It is a profound thought of German philosophy that God is leading the world, through a gradual though not uninterrupted development, to greater intelligence, freedom, and goodness. Like the individual, our race as a whole has to pass through the successive periods of childhood, youth, and maturity. Each succeeding pe-

riod inherits the accumulated wisdom of the preceding one, and adds new treasures of its own. After the lapse of many ages of striving and conflict, mankind has reached a stage of development among enlightened nations that seems to accord with the estate of manhood. Intelligence, freedom, morality, and religion, though far from being universal, prevail to a degree unprecedented in the past. Human progress is an evident fact.

With improvement in other human interests, there has been unmistakable progress in education. Indeed, the ancient world, as we shall soon see, never succeeded in producing a correct and complete theory of education. If a great thinker now and then approximated the truth, his voice was lost upon the heedless multitude. The practice could hardly be better than the theory. Hence we shall find that education was always defective, usually laying stress upon some particular phase of human culture, to the neglect of others. Sometimes the physical was emphasized, sometimes the intellectual, sometimes the moral, sometimes the religious; but never all together in perfect symmetry. It has been reserved for the nineteenth century, so distinguished for its many-sided advancement, to realize an education which leaves no part of man's nature neglected.

We are now prepared to understand the nature of the history of education. It is an exhibition of what has been thought and done in all ages and countries in reference to training the young. It sets forth the principles and methods which have prevailed at various periods and in different lands. It gives an account of the prominent educators whose theories and methods have exerted a noteworthy influence upon educational

development. It includes an inquiry into the social, religious, and political conditions which have determined the peculiar form of education, and traces the line of educational progress from its humble beginnings down to the precious heritage of the present.

The history of education is a valuable study. Education stands in close relation to the civilization of a people. It is, at the same time, both a cause and an effect. Educational history, in setting forth the influences determining the peculiar character of education in any country, becomes to some extent a philosophy of history in general. As such it is a profound study. "The education of a people," says Dr. Henry Barnard, "bears a constant and most pre-eminently influential relation to its attainments and excellences—physical, mental, and moral. The national education is at once a cause and an effect of the national character; and accordingly, the history of education affords the only ready and perfect key to the history of the human race, and of each nation in it—an unfailing standard for estimating its advance or retreat upon the line of human progress."

To speak more specifically, the study of educational history, by bringing the whole field within the range of our vision, broadens our views in regard to education. By acquainting us with the views and methods of the past, it spares us the cost of repeating experiments and mistakes. It gives the origin of present educational systems, and shows what is correct in principle and valuable in method. It inspires educational workers with greater zeal by presenting the examples of self-sacrificing and illustrious teachers. And it is a necessary study in

order to complete the comprehensive scheme included in what is properly called the science of education.

Asia is the birthplace of the human race. The march of progress, following the course of the sun, has been westward through Europe to America, which completes the circle of the globe. Here the great problems of religion, science, government, and education will probably receive their final solution. Following the course of human progress, the history of education naturally divides itself as follows:

I. The Oriental countries, including China, India, Persia, Palestine, and Egypt.

II. The ancient classical nations, Greece and Rome.

III. The Christian education of Europe and America, which is divided into—1. The period before the Reformation; and, 2. The period after the Reformation.

In this classification no account is taken of uncivilized peoples, since education with them consists almost exclusively in training the body for war and the chase. Their education is thus too primitive in its character to bring it within the scope of our present undertaking.

I.

THE ORIENTAL NATIONS.

A STRIKING fact, which throws great light upon Eastern education, is to be noted in reference to Oriental life. The individual there counts for nothing. A despotic external authority controls his destiny. Education does not aim to develop a perfect man or woman, but to prepare its subjects for their place in the established order of things. It does not aim to beautify the stone, but simply to fit it for its place in the wall. The source of this all-controlling authority varies in the different countries. In China it is fossilized tradition; in India, caste; in Persia, the state; among the Jews, the theocracy. In all the Oriental countries, this external authority determines the character of education; and, if this idea is firmly grasped, it will facilitate a thorough understanding of the educational systems of the East.

1. CHINA.

The Chinese Empire—that magnificent country which comprises a fourth part of the population of the globe—first claims our attention. Its people belong to the Mongolian race, whose genius is shown by the early invention of paper, printing, gunpowder, and the mariner's compass. Their character presents many points of

interest. They are industrious and economical; and in the relations of every-day life they are polite and kind. They honor their parents, love their children, and respect those in authority. Possessed of great patience, they endure oppression and suffering without a murmur. On the other hand, they are destitute of deep moral convictions. They are hypocritical and dishonest; and, once in authority, they are apt to become tyrannical, and even cruel. Their wives are held in contempt. Destitute of hope beyond the grave, and incapable of spiritual delights, their aspirations are confined to earthly objects. They are gross in their pleasures; and to acquire wealth, live in ease, and fill some public office, are the highest aims of their ambition.

Though one of the oldest nations in the world, the Chinese have for many ages made but little progress in civilization. They are very much the same to-day that they were more than two thousand years ago. The collective life of the people has become petrified in fixed forms. Their customs, the relations of the various classes of society, the methods of business and labor, the administration of justice, and the whole circle of thought, have all been stereotyped. They are practically unchangeable.

Notwithstanding its evident imperfections, the Chinese regard their civilization with great complacency. They are the "celestials," and the rest of mankind are barbarians. The preservation of existing institutions is an object of constant care. All deviation from traditional customs is looked upon with disfavor, improvements are hardly tolerated, and the introduction of foreign culture is generally stigmatized as barbarous. With

such a national feeling, education can have but one end. Its object is to impress upon each generation traditional ideas and customs, and thus prepare it to take its place naturally in the established order of society. It does not aim at a development of the human faculties—it is simply a cramming of the memory.

To education in this defective form there is great stimulus in China. "The importance of generally instructing the people," says Williams, "was acknowledged even before the time of Confucius, and practiced to a good degree at an age when other nations in the world had no such system; and although in his day feudal institutions prevailed, and offices and rank were not attainable in the same manner as at present, yet magistrates and noblemen deemed it necessary to be well acquainted with their ancient writings. In the 'Book of Rites' it is said 'that, for the purposes of education among the ancients, villages had their schools, districts their academies, departments their colleges, and principalities their universities.' This, so far as we know, was altogether superior to what obtained among the Jews, Persians, and Syrians of the same period." Education is forcibly and frequently inculcated in the classical Chinese literature, which is held in high esteem. The patronage of the wealthy makes education respectable and popular. Besides, education opens the only road to political preferment. All the officers of the Imperial Government are chosen from among those who have completed a long course of study and passed through the ordeal of several laborious and rigid examinations. Every community supports one or more primary schools, while the larger towns and cities have

academies and colleges. The teachers are generally competent, being prepared for their work by a long course of study. The schools are conducted in rooms destitute of comfort, and without furniture, except the chair and table of the teacher, and the desks and seats furnished by the pupils themselves.

Children are placed under the care of a teacher at the age of six or seven years. The first years of their instruction are devoted to reading and writing; and, as these are very difficult to learn, on account of the sign-character of the Chinese language, the great majority never reach any higher attainments. The teaching is wholly by rote: the pupils repeat after the teacher the names of the characters in the book given them to study. After they have learned to pronounce the characters fluently they are taught the meaning, and the moral lessons of the book are impressed upon them. An extract is given from the book first placed in the hands of pupils at school:

Men, at their birth, are by nature radically good.

In this, all approximate, but in practice widely diverge.

If not educated, the natural character is changed.

A course of education is made valuable by close attention.

To bring up and not educate is a father's error.

To educate without rigor shows a teacher's indolence.

That boys should not learn is an improper thing.

For if they do not learn in youth, what will they do when old?

Gems unwrought can form nothing useful.

So men untaught can never know the proprieties.

The discipline is severe. The teacher keeps his rattan or bamboo hanging in a conspicuous place, and he uses scolding, castigation, starving, and imprisonment, to stir up the diligence of his pupils in their necessarily distasteful tasks.

Those in pursuit of a higher education place themselves under the care of a competent teacher, from whom they receive instruction in the Chinese classics and in the art of composition. After many years of severe toil, and running the gantlet of repeated examinations in which his competitors are numbered by thousands, the successful scholar becomes a member of the Imperial Academy—a position that brings him high honors and also a generous support from the royal treasury. Henceforth he is a member of the Imperial Government.

It is proper to say a word here in reference to the Chinese classics, which form the basis of education, to the exclusion of all those studies—geography, history, mathematics, science, and language—which are deemed in the Western world so indispensable to a liberal culture. These classics in their present form are the work of Confucius, the most distinguished of Chinese philosophers and teachers, who lived in the fifth century before Christ. They are in part compilations made by him from older works and in part his own composition. They treat chiefly of the duties of social and political life, though they are also in some measure historical. "I teach you nothing," says Confucius, "but what you might learn yourselves—viz., the observance of the fundamental laws of relation between sovereign and subject, father and child, and husband and wife, and the

five cardinal virtues, universal charity, impartial justice, conformity to established ceremonies and usages, rectitude of heart and mind, and pure sincerity." He thus speaks of filial duty in particular: "There are three thousand crimes to which one or another of the five kinds of punishment is attached as a penalty, and of these no one is greater than disobedience to parents. When ministers exercise control over the monarch, then there is no supremacy; when the maxims of the sages are set aside, then the law is abrogated; and so those who disregard filial duty are as though they had no parents. These three evils prepare the way for universal rebellion." The teaching of Confucius was a system of natural morality, from which the ideas of a personal God and future life were excluded. While it has sapped the foundations of all religion, it has fostered a painstaking attention to outward ceremony.

To sum up the results of this inquiry, the whole system of Chinese education confines the mind within a narrow circle of ideas, perpetuates the fixed customs of the people, encourages outward morality and ceremony, and renders progress well-nigh impossible. In the language of an able author already quoted: "Owing to this undue attention to the classics, the minds of scholars are not symmetrically trained, and they disparage other branches of literature which do not directly advance this great end. Every department of letters, except jurisprudence, history, and official statistics, is disesteemed in comparison; and the literary graduate of fourscore will be found deficient in most branches of general learning, ignorant of hundreds of common things and events in his national history, which the

merest school-boy in the Western world would be ashamed not to know in his. This course of instruction does not form well-balanced minds, but it imbues the future rulers of the land with a full understanding of the principles on which they are to govern, and the policy of the supreme power in using those principles to consolidate its own authority." As adapted to perpetuate an exclusive national existence, the Chinese system may not inappropriately be designated *ancestral education*.

2. INDIA.

The consideration of education in India ought to possess the greater interest for us, since the Hindoos are of the same blood as ourselves. As a branch of the great Aryan or Indo-European family of nations, they moved southward from their Central Asiatic home, some two thousand years before Christ, into the vast peninsula which extends from the Himalaya Mountains into the Indian Ocean. There they brought into subjection the swarthier aborigines; and, under the influence of the favorable soil and climate, they developed into a very numerous people. The wealth of their country has always been a temptation to the avarice of other nations. The inoffensive character of the people has rendered them an easy prey. The Greeks, the Mohammedans, the Portuguese, and the Dutch have successively reached out a covetous hand after the natural and artificial treasures of the country. Last of all, the English, with their insatiable thirst for empire, have brought the whole peninsula under their sway, thereby adding a population of one hundred and ninety millions to the British do-

minion, and securing for the Queen the additional title of Empress of India. All these foreign influences have wrought changes in the social, political, and religious condition of the people of India; and, at present, all the ancient usages and laws are in a process of rapid dissolution.

The language of the ancient Hindoos was Sanskrit, which, as nearly related to the Latin, Greek, English, and other Indo-European languages, is of especial interest to the philologist. Though the Sanskrit has given place to dialects, as did the Latin after the fall of the Roman Empire, it is still the learned language of the Brahmans. This language is the repository of a literature of great antiquity and surprising magnitude. The "Veda," a collection of religious hymns, was compiled more than a thousand years before Christ. The "Mahá-bhárata" is an epic poem, whose length is more than double that of the "Iliad," "Æneid," and "Paradise Lost" combined.

The prevailing religion is Brahmanism. For the more intelligent classes, this religion is pantheistic, and closely resembles modern philosophic pantheism in Germany. According to Brahmanism, God is an unconscious but all-pervading spiritual presence which has unfolded from within himself the material and visible universe. As God is thus believed to be in everything, this religion easily and naturally degenerates among the masses into polytheism, in which the various objects of nature are worshiped as divinities.

The people present strange contradictions of character. They are gentle, docile, polite, industrious, and faithful in service; at the same time they are de-

ceitful, jealous, ungrateful, avaricious, and full of flattery. They are divided into four principal classes or castes: The *Brahmans*, or holy teachers; the *Kshatriyas*, or soldiers and kings of the nation; the *Vaisyas*, or farmers and traders; and the *Sudras*, or servants of the three other classes. The three higher castes all enjoy peculiar rights and privileges, though the Brahmans possess the greatest influence, and are the repositories of learning for the whole people. Of the relative position of the several castes, Manu, the reputed author of the most celebrated law-book of the ancient Hindoos, says: "Whatever exists in the universe is all in effect, though not in form, the wealth of the Brahman; since the Brahman is entitled to it all by his primogeniture and eminence of birth. . . . The first part of a Brahman's compound name should indicate holiness; of a Kshatriya's, power; of a Vaisya's, wealth; and of a Sudra's, contempt." Of the caste system as a whole, a writer, who had ample opportunities of knowing, has said: "It has made the Hindoos contented with their lot—whether good or bad, high or low—and in doing so has provided a kind of universal happiness, which, if not of the highest kind, was better than none. Even now as it is passing away, and justly so, we have firm faith that the God of all mankind, who permitted this wondrous institution to grow up and flourish for thousands of years, will overrule it for good."

The caste system of India is the controlling influence in education. Each individual is born into one of the four principal castes, whose usages he is compelled to learn and observe. As these are very numerous, descending into insignificant details in daily life, such in-

struction forms the principal part of the child's education. The Sudras and females are excluded from all other kinds of instruction.

At the usual age of six or seven years the child is sent to school. This is presided over by a Brahman, who regards it a disgrace to receive a stipulated salary, and who is remunerated by voluntary gifts from his patrons. These gifts range from mere trifles to considerable estates; but, upon the whole, leave the teacher poorly paid. He is held in high honor, and pupils render him greater reverence than they show to their parents. School is usually kept in the open air, under the shadow of a friendly tree; but, in case of bad weather, it is transferred to a thatched shed, or other covered building. Along with ceremonial usages and moral instruction, reading, writing, and arithmetic are taught. The first exercises in writing are in the sand. The teachers are aided not only by regular assistants, but also by the more mature pupils of the school. The lessons are learned aloud by the whole body of pupils at once. The discipline, in the main, may be regarded as mild. It is only after admonition has failed that bodily pain is inflicted by the rod, by placing the pupil in an uncomfortable position, or by pouring cold water upon him—a mode of punishment peculiar to India.

The following extracts from a description written by a Hindoo, present some interesting details of the old-style school:

An hour before closing the school the pupils are all made to stand up in a line, and, with their hands applied to their hearts, they repeat the multiplication-table, the alphabet, and the sacred hymns or *slokas*; at the end of

each one of the last their hands are raised to their foreheads, and their bodies bowed in reverence to the god in whose honor it was said. The master then instructs them in a long and tedious catalogue of frivolous duties to be discharged in their houses; to which they all assent with a loud "Yes, yes!" After this they prostrate themselves before the teacher, and are dismissed to their respective homes. The teacher must be a Brahman. The wealthy and respectable will never condescend to have their children educated by one of a lower caste.

The system of education practiced in these schools is very defective, and the children make but little progress; they take a month or more to learn the alphabet, a year or two to learn to read, and still longer to write. Much time is wasted also in learning useless arithmetical tables. The master is slothful, and, like all Brahmans, fond of sleeping by day. In the afternoon, after the boys have collected for work, he considers his duties over till five, and so indulges in a sound sleep. Meanwhile the pupils must get along as best they can; but the teacher must not be disturbed.

The teacher, however, is great on the subject of caste—on what should be eaten, what abstained from; on idolizing the Brahmans and avoiding the pariahs; on his genealogy, his rights, his privileges, and on the mean origin and low position of other castes. He is ever eloquent on the necessity of feeding, clothing, and sheltering Brahmans, and of subscribing to the marriage of their sons and daughters; and is ever mourning, in melancholy terms, that the native rule has departed, and with it the rajahs, who, supplying all the wants of the Brahmans, left them nothing to do but to eat, drink, and sleep.*

Higher education in India has received, from ancient

* "Every-day Life in India," by Rev. A. D. Rowe. In other particulars the description from which these extracts are taken seems to be overdrawn.

times, careful attention. Although the higher institutions were destined chiefly for the Brahmans, they were open also to students from the second and third castes. The subjects pursued constituted an extensive curriculum, and included grammar, mathematics, history, poetry, philosophy, astronomy, medicine, and law. This course, which required twelve years for its completion, was pursued in its whole extent only by the Brahmans. The students of the warrior caste, from which the civil officers were chosen, and of the trading or agricultural caste, pursued only partial courses, with immediate reference to the wants of practical life. In the science of mathematics, the Hindoos have made noteworthy progress, and have placed the rest of mankind under obligation for their development of this branch of knowledge.

In the system of India no provision is made for physical education. The Hindoo is naturally averse to physical exertion. A life made up of eating, drinking, and sleeping is his ideal of happiness. He does not feel that exuberant vitality which makes mere existence a conscious enjoyment, and wrestling with difficulties a positive pleasure. This is a blessing reserved for the hardier children of the West. The religious education lacks the conception of a conscious, personal God; and, in practice, religion has degenerated into a set of puerile observances. The highest religious aspiration is to be absorbed into the great, unconscious world-spirit. This ideal leads to an intensely selfish subjectivity, which violates, by its idle dreaminess, our fundamental duties to God and man. The intellectual education of the Hindoos is not wholly undeserving of commendation. By nature they are a contemplative people, and this

natural tendency is constantly fostered by their religion. But, however subtle their intellectual operations may be, the Hindoos are wanting in that strong projective force that is necessary to subdue Nature and lift the masses to a high degree of civilization. The name given to the system of India is *caste education*.

3. PERSIA.

Persia occupies an important place in history. It attained its highest point of greatness under Cyrus, who freed it from the dominion of the Medes, and elevated it into a mighty empire. At this period, Persia was the foremost nation of the world, not only in power, but also in civilization. In education it surpassed both in theory and practice the other Asiatic nations.

The religion of Persia, founded by Zoroaster in the sixth century before Christ, is interesting in itself, and also in its relation to education. Nowhere, if we except the Jews, was this relation closer than among the ancient Persians. Zoroaster discovered a dualism running through all nature. The contrast between light and darkness, fruitfulness and barrenness, useful and hurtful animals, fortune and misfortune, life and death, led him to conceive of two spiritual beings, the one good and the other bad, who divide the world into hostile kingdoms. At the head of the kingdom of light is Ormuzd, whose symbol is light; at the head of the other is Ahriman, whose symbol is darkness. In the end, the kingdom of good will prevail; and it is the duty of every man to contribute to this triumph. He aids in this work by cultivating the soil, caring for

herds, educating children, maintaining physical and moral purity, and opposing whatever is evil and hurtful in the world.

As in all Asiatic nations, the women were slavishly subordinate, and excluded from the advantages of education. Every morning the wife was required to kneel at the feet of her husband and ask nine times, "What do you wish that I should do?" And having received his reply, she must humbly withdraw to obey his commands. Children were objects of parental pride; and as they were looked on as the source of the future power and prosperity of the state, the king was accustomed to show special favors to the heads of the largest families. The utmost care was exercised in the training of children. Up to the age of seven, they were left beneath the parental roof under the care of the mother; but after that age they were regarded as belonging to the state, and were educated in public institutions. Till the age of fifteen this education was physical and moral. The body was strengthened and hardened by temperate habits in eating and drinking, by gymnastic and military exercises, and exposure to heat and cold. The moral nature of the child was trained with assiduous attention. As far as possible, it was preserved from contact with vice, while the virtues of self-control, truthfulness, and justice were constantly enjoined and practiced. Ingratitude and lying were considered the most shameful vices, while truthfulness was looked on as the highest virtue. At about fifteen, the boy passed to youth's estate; and at this critical period of life he was subject to strict supervision and wholesome restraint. Through severe military discipline, he was prepared for the hardships

of war, while the wise instruction of overseers or governors fitted him for the civil service of the state. The teachers were the ripest and worthiest men of the country. At the age of fifty, the Persian was exempt from military service. It was from among these men of advanced age and ripe experience that the instructors of youth were chosen; and they were expected to be patrons of the virtues that they inculcated by precept.

Xenophon has treated at some length of Persian education, and has given us a clear insight into many details. "Most states," he says, "let each one bring up his sons as he pleases, and further permit the older youth to live as they choose; only they forbid them to steal, to rob, to enter a house by force, to strike in secret, to commit adultery, and disobey the civil authority. If any one commits such a misdeed, they subject him to punishment. The Persian laws, on the contrary, take the initiative, and exercise a care that the citizens from the beginning on have no inclination to a wicked or shameful deed. For this they provide in the following manner: They have a public market-place which they call free. The part of the market-place that adjoins the courts of justice is divided into four parts: the first is reserved for the boys, the second for the youths, the third for the men, and the fourth for the aged. Each one was restricted to his allotted place; the boys and men were required to appear at daybreak, while the aged could come, except on certain days, whenever they pleased. The youths that were not yet married spent the night in arms guarding the courts of justice. As the Persians are divided into twelve tribes, every division of the market-place had twelve overseers;

those over the boys must distinguish themselves through ability to teach, while those over the youth should be qualified to lead them to virtue. The overseers of the men were charged to see that the laws and ordinances were observed. The overseers of the aged held the latter to a performance of their duties. The boys went to school to have their sense of justice awakened and developed. Therefore the masters spent the day especially in holding court among the boys, who, after the manner of men, brought indictments against each other for theft, violence, cheating, offensive language, etc., not only the convicted prisoners, but also the false accusers being punished. Ingratitude was punished with especial severity; for the Persians hold that the ungrateful can love neither the gods, their parents, their fatherland, nor their friends, since with ingratitude shamelessness is always united, and this latter is the most prolific source of all vices."

An incident in the life of Cyrus will illustrate more in detail the emphasis that was laid on justice in Persian education. When Cyrus, then a boy of twelve years, was brought to the court of his grandfather Astyages, he was asked by his mother, "My child, how will you learn justice at this despotic court, since your teachers are at home?" Cyrus answered, "Mother, I understand justice very well already. For my teacher, since I showed an eagerness for learning, often placed me as judge over others; and only once was I beaten for giving a wrong decision. One time a large boy with a small coat compelled a little boy with a large coat to exchange with him. I decided that it was better for both, because each had the coat that fitted him best.

Then I was beaten, and told that my decision would have been right if the question had been whom the coat fitted; but since the question had been who was the lawful owner of the coat, I ought to have inquired to whom the coat really belonged, and whether taking a thing by force rendered its possession lawful."

The Magi were an important class in Persia. They had charge of all the religious ceremonies, and were the learned class, being at once both priests and philosophers. So great was their reputation that people from distant countries came to receive instruction at their hands. The learning of Pythagoras, that gave him such eminence among the Greeks, is said to have been borrowed in large measure from the Magi. The king was required to pass some time under their instruction, in order to learn the principles of governing and the right way to worship the gods. After ascending the throne, he did not determine any important undertaking without consulting them. From this circumstance, they were regarded as the directors of princes.

The one-sidedness of Persian education is evident. The state, which was absolutely despotic, was the controlling influence. As physical strength and moral rectitude were held to be the qualities of greatest utility, the one fitting for war and the other for the administration of justice, they alone were emphasized in the long period of public training. Intellectual culture was wholly neglected in the school-training. Reading and writing, if they formed any part of instruction at all, were taught only in a very limited measure. The higher branches of knowledge, as philosophy, astronomy, and

medicine, were pursued only by the Magi. The system of Persia has been denominated *state education*.

4. THE PEOPLE OF ISRAEL.

The Semitic race, including the Babylonians, Assyrians, Phœnicians, and especially the children of Israel, unites profound contemplation with great practical wisdom. For many centuries it played an important part in the world's history, founding mighty and warlike kingdoms. Great cities arose in the valleys of the Euphrates and Tigris, remarkable progress was made in the arts and sciences, manufactures and commerce flourished, and a considerable degree of culture was attained. The forces of nature, particularly the sun and the moon, were worshiped as divinities. A kind of picture-writing in cuneiform or wedge-shaped characters was employed; and books, consisting of square clay tablets written on both sides and treating of geography, history, mathematics, astronomy, and law, were collected in public libraries. The Phœnicians were for a long time the leading maritime nation of antiquity; and, next after the Jews, they have exerted the widest influence upon the Western world. They were the inventors of our alphabet which, with certain modifications, was transmitted to us through the Greeks and Romans. Further than these general statements, which indicate the existence of no small degree of learning among at least certain classes, we are unacquainted with the educational history of Babylonia, Assyria, and Phœnicia.

But the ancient Jews, whose literary remains have

been pretty fully preserved, deserve further study. This people has occupied a unique position in the world's history. To it was assigned a peculiar mission ; and over its development there watched a special Providence granted to no other nation. It was the divinely-appointed office of the Jews to preserve, in the midst of idolatrous nations, a knowledge of the true God, and to furnish at last, in the fullness of time, the great Teacher of our race. For a long period; God condescended to be the ruler and lawgiver of this people. And even after a formal kingdom had been established under Saul, the rulers were so controlled by the law previously given to Moses and by the prophets who were raised up at particular junctures, that the theocratic principle continued dominant for many centuries.

The history of this strange people extends through nearly four thousand years. It has experienced alike the joys of prosperity and the pains of adversity. But whatever the character of its outward circumstances, whether exercising a wide dominion from a splendid capital, or wandering among all nations as a by-word and reproach, it has clung with the utmost tenacity to its national character and customs. And the influence which it has exerted upon the world is incalculable. It has supplied the basis of all true theology ; it has given a system of faultless morality ; and, in Christianity, it has provided the most perfect form of religion. The civilization of Europe and America can be directly traced to the Jews.

The educational history of this people has varied with its political and social condition. In this study, attention is directed to the most important and typical

period. The Jewish nation reached its highest point of development—its golden age—under the reigns of David and Solomon.

Among the Jews the theocracy controlled both the theory and practice of education. If it gave education a very one-sided tendency, it yet laid stress upon an important and hitherto neglected principle. The end of education among the Jews was to make faithful and obedient servants of the living God. It aimed at preparing each succeeding generation to fulfill faithfully its part in the grand work assigned to that people. The divine Lawgiver himself prescribed the principal subjects and methods of instruction. The law, whether moral, ceremonial, or judicial, was to be carefully studied. "Therefore shall ye lay up these my words," are the Lawgiver's instructions, "in your heart and in your soul, and bind them for a sign upon your hand, that they may be as frontlets between your eyes. And ye shall teach them your children, speaking of them when thou sittest in thine house, and when thou walkest by the way, when thou liest down, and when thou risest up. And thou shalt write them upon the door-posts of thine house, and upon thy gates." *

An analysis of this passage reveals several important particulars. It shows that the Hebrew parent was not only to impart oral instruction to his children, but to teach them also reading and writing. As he was required to inscribe the words of the Lord upon his door-posts and gates, he must himself have learned to write; and, as he wrote them for his children, they must have been taught to read. Hence, it appears that the ability

* Deut. xi, 18-20.

to read and write was general among the ancient Jews; and, in this particular, they surpassed every other nation of antiquity.

Education was restricted to the family, in which the father was the principal teacher. There were no popular schools nor professional teachers. Yet the instruction of the Jew, as is evident from the Pentateuch, embraced a vast number of particulars. His whole life was hemmed in with minute regulations; and ignorance was not accepted as a valid excuse for transgression. The various kinds of food were prescribed; the principles that were to govern their relations to one another were specifically given; directions for the treatment of strangers and servants were minutely laid down; the facts of their wonderful history and the precepts of the moral law had to be carefully studied; and the burdensome ritual of the tabernacle and temple had to become thoroughly familiar.

Among the potent educational agencies of the Jews, that of the annual national festivals merits consideration. These festivals, three in number, required every adult male to present himself annually before the tabernacle or temple at Jerusalem. Commemorating important national events, they kept the people acquainted with their past history. The **P**assover recalled the delivery from Egyptian bondage; the **P**entecost, the terrific splendors that attended the giving of the law; the feast of tabernacles, the hardships and miraculous preservation in the wilderness. These frequent reunions not only contributed to national and religious unity, but they exerted a strong educating influence upon the people.

The higher education was not wholly neglected, though no institutions of purely secular learning were established. The priests, whose studies embraced a wide range of subjects, constituted the learned class. "In order to answer their destination," says Jahn, in his "Hebrew Commonwealth," "the Levites more than other Hebrews were to study the book of the law; to preserve and disseminate it in exact copies; to perform the duties of judges and genealogists, and consequently to be theologians, jurists, and historians. . . . As the priests and Levites were to test the accuracy of weights and measures, of which there were several models preserved in the sanctuary, it was necessary that they should understand something of mathematics; and as they were to determine and announce the movable feasts, new moons, years, and intercalary years, they had occasion for the study of astronomy. The priests were to instruct the people in religion and law, and to solve questions which might arise upon these subjects. According to the spirit of the institution, the Levites were also instructors of the people, which office they in reality executed when they publicly sang psalms according to the arrangement of David, and to which they were expressly appointed by Jehoshaphat."

The schools of the prophets, of which there are only scanty notices in the sacred books, appear to have been private institutions for the study of poetry, medicine, and, in particular, the law. They were presided over by men venerable for their age and ability, and patronized by youths and adults. They corresponded, in some degree, to the modern university, the law, however, overshadowing all other studies. The influence of these

schools can not have been otherwise than favorable to Jewish culture. They were in a flourishing condition under the reign of David; and it is not improbable that the "sweet singer of Israel" himself had profited by their instruction. It was at this time that religious poetry reached its zenith. The Psalms of David, as portraying the deepest and most varied religious experience, have never been superseded. After a lapse of nearly three thousand years, they are regarded as an invaluable poetic and literary treasury; and some of its precious gems are set in the memory of each passing generation.

"From a survey of the whole matter," says Wines, "the conclusion seems warranted that the education of the Hebrew people, conducted mainly, though not wholly, under the domestic roof, was nevertheless a national education, and worthy of the imitation of other nations. Especially does it deserve to be studied and copied so far as that branch of education is concerned which consists in development as distinguished from instruction. The Hebrew law required an early, constant, vigorous, and efficient training of the disposition, judgment, manners, and habits, both of thought and feeling. The sentiments held to be proper to man in society, were imbibed with the milk of infancy. The manners considered becoming in adults were sedulously imparted in childhood. The habits regarded as conducive to individual advancement, social happiness, and national repose and prosperity, were cultivated with the utmost diligence. The greatest pains were taken to acquaint the Hebrew youth with their duties, as well as their rights, both personal and political. In a word, the

main channel of thought and feeling for each generation was marked out by the generation preceding it, and the stream for the most part flowed with a steady current."

The name given to the ancient Jewish system is *theocratic education*.

5. EGYPT.

In Egypt we have, perhaps, the oldest civilization in the world. The great Pyramids, which indicate considerable intellectual development, were erected more than two thousand years before Christ. The ancients looked upon Egypt as a school of wisdom. Greece sent thither illustrious philosophers and lawgivers—Pythagoras and Plato, Lycurgus and Solon—to complete their studies. In the Scripture it is said, in praise of Moses, that he "was learned in all the wisdom of the Egyptians."

At an early period Egypt made high attainments in the mechanic arts. Great perfection was reached in spinning and weaving; glass was manufactured, and some of the secrets of coloring it have baffled modern ingenuity; iron and steel, together with the common agricultural and mechanical implements made from them, were in use. Magnificent ruins still make a profound impression upon the beholder; while single specimens of art have been transported over distant seas to adorn the public places of great modern cities. The Temple of Karnak, from its massive forms and brilliant decorations, has been pronounced the most magnificent of man's architectural works.

The Egyptians were mild in disposition and gentle in manners. Like the people of India, they were divided into castes, the highest of which was composed of the priests. The priests possessed immense wealth and influence, were supported by the state, and held one third of the land free of tax. They were the chief representatives of learning, and the recognized intellectual leaders of the people. The military class ranked next to the priests. The rest of the population was divided into three general classes: the first included the farmers and boatmen; the second, the mechanics and tradesmen; the third, herdsmen, fishermen, and common laborers.

The position of the priests has been portrayed by Jahn with an interesting particularity. "The Egyptian priests," he says, "were a separate tribe, which was divided into three subordinate classes; and they performed not only the services of religion but the duties of all the civil offices to which learning was necessary. They therefore devoted themselves in a peculiar manner to the cultivation of the sciences. This learned nobility, so to speak, was strictly hereditary, and no one from another tribe could be received among its members. They studied natural philosophy, natural history, medicine, mathematics (particularly astronomy and geometry), history, civil polity, and jurisprudence. They were practicing physicians, inspectors of weights and measures, surveyors of land, astronomical calculators, keepers of the archives, historians, receivers of the customs, judges, and counselors of the king, who was himself a member of their tribe. In short, they—like Raguel, the priest of Midian, and Melchizedek, the priest

and king of Salem—formed, guided, and ruled the people, by establishing civil regulations, performing sacred services, and imparting religious instruction. They were liberally rewarded for the discharge of these important duties. They not only possessed large estates in land, which, if we may credit Diodorus Siculus, occupied a third part of Egypt; but they also received from the king a stated salary for their services as civil officers. However suspicious such an order may appear to many at the present day, it was admirably adapted to those times, and by means of it Egypt was raised far above all the nations of antiquity, both in regard to her civil institutions and her advancement in the sciences. Hence, even the Greeks in ancient times were accustomed to borrow their politics and their learning from the Egyptians.”

The foregoing facts prepare us for a better understanding of Egyptian education. This great interest was under the absolute control of the priests. The education of the lower classes was of the most elementary nature. The youth destined for business pursuits were commonly taught reading, writing, and arithmetic, while the rest learned from parents or relatives the manual occupation to be followed through life. The method of teaching arithmetic has been praised by Plato, and seems to have anticipated some of our modern methods, inasmuch as numbers were taught in the concrete by means of plays. There were two species of writing prevalent: the demotic, which seems to have been a hybrid between hieroglyphic and syllabic writing, was in use among the common people; while the hieratic, which was more purely hieroglyphic, was employed by

the priests. The bark of the papyrus-reed, which grew in jungles along the Nile, was used instead of paper. The priestly and warrior castes enjoyed greater educational advantages. At Thebes, Memphis, and Heliopolis, there were institutions for superior instruction which were open to these two classes. The course of study embraced language, mathematics, geometry, astronomy, natural science, and religion, though the most advanced instruction was reserved for the priesthood alone. The annual overflow of the Nile, which destroyed landmarks in many cases, made a knowledge of mathematics, particularly of geometry, of high importance, and hence this subject received especial attention. Gymnastics and music were excluded from the general means of culture. "It is not the custom in Egypt," says Diodorus, "to learn gymnastics and music; it is believed that the former is dangerous to the youth, and that the latter is not only useless, but even hurtful, because it renders men effeminate." Yet in Chemnis gymnastics was taught, and music was employed in connection with religious services. A religious element was not wanting in Egyptian education. Reverence for the priesthood and religion, and regard for the usages handed down by tradition, were carefully inculcated. The Egyptian system has been designated *priestly education*.

In the seventh century before Christ a change took place in the educational practice of Egypt. Under Psammetichus, elements of Greek and Phœnician culture were introduced. He concluded treaties with the Grecian states, and opened his cities to foreign commerce. His children were taught in the Grecian sciences. The Greek language formed for a time a subject of study.

At a still later period Alexandria attained to great prominence, and became the center not only of trade but also of culture for the Mediterranean states. As its culture, however, was cosmopolitan rather than Egyptian, embodying Grecian and Jewish elements to a large extent, it does not here demand further notice.

II.

THE ANCIENT CLASSICAL NATIONS.

THE ancient classical nations, Greece and Rome, are surrounded with a peculiar charm. They are the earliest representatives of European civilization, and as such they have placed us under great and permanent obligations. Though the stream of culture has broadened and deepened since their glory waned, receiving in particular the mighty tributaries of Christianity and modern science and invention, it must yet trace its origin to the renowned cities of Athens and Rome. They have left us a rich heritage in the domains of science and government; they have transmitted heroic deeds of patriotism that have never been surpassed; in architecture and sculpture they have furnished models and inspiration for all time; and in the most important departments of literature, in poetry, history, oratory, and philosophy, they have produced works of exalted genius and perpetual worth. These nations must always retain a prominent place in the history of the world.

But the prominence long held by Greece and Rome will be less marked in the future. At present they occupy a smaller share of the world's attention than was formerly the case. Many young and vigorous rivals

have appeared. Great modern nations have arisen whose achievements and importance demand recognition. They have produced literatures that in depth and extent, if not in form, must be conceded to surpass antiquity. They have taken up the sciences as left by the ancient world, and have led them to new conquests. Sciences of which the ancients knew nothing have been developed, and have made rich contributions to modern progress. Commerce and invention, under the control of humane ideas, have largely broken down narrow national prejudices and made a brotherhood of the nations of the earth. The telegraph, the press, and the railroad, working in harmonious co-operation, bring the whole world, with its manifold interests, thoughts, and deeds, within the circle of our daily thought. In view of these facts, it is safe to say that Greece and Rome are destined to lose something of their former pre-eminence in the world's thought.

These two nations naturally occupy a prominent place in the history of education. They have left us tolerably complete records of their thought and achievements. In education they mark an obvious advance upon the defective systems of the Orient. The individual comes into a certain prominence. He is not crushed beneath the weight of some relentless external power, but attains at length to a degree of personal freedom. To some extent at least, the worth of the individual is appreciated, and, within certain limits, he is left to himself in the pursuit of wealth and happiness. Education becomes the subject of careful, scientific thought, and enlarged views of its nature are promulgated. It is controlled by higher principles. The

range of studies is widened. Beautiful results are obtained, as exhibited in the physical and intellectual life of the people. No other nations have exerted such immeasurable influence upon the world.

1. *GREECE.*

Greece, as the oldest of the ancient classical nations, naturally claims our attention first. It is about half the size of Pennsylvania, and possesses a mild climate and rich diversity of surface. Its numerous coast indentations give it peculiar facilities for commerce. These facts are worthy of mention, for they were not without influence upon the well-endowed and versatile inhabitants. As a branch of the Aryan family, the Greeks are of the same blood as the leading nations of Europe. Greece was divided into a considerable number of little states. This gave occasion to almost incessant strife, during which one and another of the states, according to the skill of its leaders, or the number of its allies, gained the ascendancy. In the history of education, however, only two states, or rather two cities, are worthy of consideration. These are Sparta and Athens. It is here alone, so far as the records have descended to us, that a complete system of education was developed. During the heroic age to which belongs the immortal siege of Troy, education possessed but a single character in all Greece. It was patriarchal. The father trained his sons to physical strength and filial piety; and the mother trained her daughters to household duties and domestic virtues. In the language of Schiller, "to throw the spear and honor the gods" was the end of

male education. At a later date, when Greece had attained its highest power, when Leonidas defended Thermopylæ, and Miltiades won the field of Marathon, the educational systems of Sparta and Athens were in striking contrast, and contributed no little to perpetuate and imbitter the feud existing between these two proud cities.

(A.) SPARTA.

This city was inhabited by the Dorians, a hardy and warlike race of Greeks, that held tenaciously to old customs, and sternly set themselves in opposition to the highest forms of culture. In the ninth century before Christ, Lycurgus prepared a constitution for Sparta corresponding to the Doric character and the peculiar circumstances of the state. The Spartans, including only about nine thousand families, were but a small part of the population of Laconia, though they were the conquering and ruling class. There were two other classes still more numerous, and sorely discontented with Spartan domination: these were the Pericæci, who lived as freemen in the towns adjacent to Sparta; and the Helots, who were bound to the soil as serfs. In order to maintain their supremacy in the midst of this hostile population, it was necessary for the Spartans to be constantly vigilant and strong. The system of Lycurgus, harsh and repulsive in nearly all its features, aimed at training a powerful body of soldiers. It transformed Sparta into a perpetual training-camp. Lycurgus made a new distribution of land; he made iron the circulating medium of the country; and he required the male portion of the population to live in common at public tables. By

these sweeping regulations he struck down many evils in the commonwealth. With the abolition of wealth and commerce, pride, avarice and luxury were destroyed. The sternest simplicity prevailed. "The most masterly stroke of this great lawgiver," says Plutarch, "by which he struck a yet more effectual blow against luxury and the desire of riches, was the ordinance he made that they should all eat in common, of the same bread, of the same meat, and of kinds that were specified, and should not spend their lives at home, lying on costly couches at splendid tables, delivering themselves up into the hands of their tradesmen and cooks, to fatten them in corners, like greedy brutes, and to ruin not their minds only, but their very bodies, which, enfeebled by indulgence and excess, would stand in need of long sleep, warm bathing, freedom from work, and, in a word, of as much care and attendance as if they were continually sick."

The education of Sparta was chiefly physical. The children were regarded as the property of the state. The new-born babe was brought before a body of judges, and, unless it was approved of as a strong and promising child, it was destroyed. Up to the age of seven years, the child remained under the care of its natural guardians. After that time the boys were placed in public educational establishments, where they were subjected to a rigorous discipline. Their fare was coarse and meager; their clothing scanty; and their beds, piles of rushes plucked with their own hands from the banks of the river. "After they were twelve years old," says Plutarch, "they were no longer allowed to wear any under-garment; they had one coat to serve them a

year; their bodies were hard and dry, with but little acquaintance with baths and unguents; these human indulgences they were allowed only on some particular days in the year. They lodged together in little bands upon beds made of the rushes, which grew by the banks of the river Eurotas, which they were to break off with their hands without a knife; if it were winter, they mingled some thistle-down with their rushes, which it was thought had the property of giving warmth." They were encouraged to supplement their daily allowance of food by theft. If detected, they were severely whipped for their want of skill. In order to strengthen and harden the body, they were continually trained in gymnastic exercises, the chief of which were jumping, running, wrestling, spear-throwing, and quoits. In the system of Lycurgus but small provision was made for literary culture. Reading and writing were taught only to a very limited extent. The absence of formal intellectual training, however, was partly compensated by the constant association of the young with the old, from whom they imbibed lessons of practical wisdom. At the public tables they were instructed in state affairs by the conversation of leading men; they learned to converse in an intelligent and agreeable manner; and by a natural spirit of imitation they early acquired a dignified bearing and practical wisdom beyond their years. Their judgment was cultivated by frequent questions requiring well-considered answers. A sententious mode of speech was carefully inculcated. Lycurgus himself, if we may judge by certain anecdotes related of him, affected a curt and energetic style. To a Spartan who urged the establishment of a democracy in Lacedæmon,

he said, "Begin, friend, and set it up in your family." To another who asked why he permitted such trivial sacrifices to the gods, he replied, "That we may always have something to offer them."

The moral education of Sparta presented many admirable points. The Spartan youth were taught to maintain an absolute control over their appetites, and to observe temperance in all their habits. Drunkenness was looked upon as a shame. A modest and retiring manner was inculcated until the moment for action came; then the Spartan youth were quick, aggressive, and strong, ready to purchase victory with their lives. They were inured to heat and cold, hunger and fatigue; they were accustomed to wear the same clothing winter and summer, and to bear great physical suffering with impassive countenance. Obedience to parents and reverence for established usages were carefully cultivated. The respect entertained for age was so great that it was said to be a pleasure to grow old in Sparta. This respect was shown by saluting the aged, rising up in their presence, making place for them in company, and, above all, by receiving with submissive spirit their advice and reproofs. An old man once entered a theater at Athens too late to get a seat. As he stood hesitating a moment, he was beckoned by a group of young Athenians. When he had made his way to them, they retained their seats, and thus exposed the old man to ridicule. As he withdrew in confusion, he came to the benches occupied by the Lacedæmonian ambassadors, who rose in a body to receive the old man among them. The Athenians, suddenly struck by this display of characteristic Spartan virtue, burst forth in applause; whereupon the old man

exclaimed, "The Athenians know what is right, but the Spartans practice it."

The musical education of the Spartans has been well described by Plutarch. "Nor was their instruction in music and verse," he says, "less carefully attended to than their habits of grace and good breeding in conversation. And their very songs had a life and spirit in them that inflamed and possessed men's minds with an enthusiasm and ardor for action; the style of them was plain and without affectation; the subject always serious and moral; most usually it was in praise of such men as had died in defense of their country, or in derision of those that had been cowards—the former they declared happy and glorified, the life of the latter they described as most miserable and abject."

The girls were not neglected. In the interests of a hardy race, they were encouraged to engage in gymnastic exercises, in which the claims of modesty were often forgotten. This physical training was not without perceptible results, and the Spartan women became the admiration of all Greece for their development, strength, and beauty. They cherished a passionate love of country. Nothing appeared to them so shameful as cowardice, and the Spartan mother could hear unmoved of sons and husbands slain in battle, if they died facing the enemy.

Though crude in form, and destructive of the best instincts of our nature, the system of Sparta admirably subserved its purpose. It made the Spartans a powerful band of warriors, secured them continual supremacy in Laconia, and raised them for a time to the leadership of Greece. It produced Leonidas. "The Spartan educa-

tion," to quote Thirlwall's excellent summary, "was simple in its objects; it was not the result of any general view of human nature, or of any attempt to unfold its various capacities; it aimed at training men who were to live in the midst of difficulty and danger, and could be safe themselves only while they held rule over others. The citizen was to be always ready for the defense of himself and his country, at home and abroad; and he was, therefore, to be equally fitted to command and to obey. His body, his mind, and his character were formed for this purpose, and for no other; and, hence, the Spartan system, making directly for its main end, and rejecting all that was foreign to it, attained, within its own sphere, to a perfection which it is impossible not to admire."

We may call the system of Sparta *martial education*.

(B.) PYTHAGORAS.

At this point it is proper to notice the labors of a great educator who in spirit, though not by birth, was allied to the Dorians. It is Pythagoras. He is an interesting character, whether we regard the keen penetration of his intellect, his moral excellence, his system of education, or the influence exerted by him upon his contemporaries. As he left no written records, not a few mythical stories have been connected with his origin, and many of his teachings are involved in obscurity. He was born about 580 B. C., on the island of Samos. After spending many years in private study, he sought to increase his store of knowledge by travel. In Egypt he came into possession of the wisdom of the priests, by which his subsequent teachings were perceptibly influ-

enced. "The spectacle of Egyptian habits," says Grote, "the conversation of the priests, and the initiation into various mysteries or secret rites and stories not accessible to the general public, may very naturally have impressed the mind of Pythagoras, and given him that turn for mystic observance, asceticism, and peculiarity of diet and clothing, which manifested itself from the same cause among several of his contemporaries, but which was not a common phenomenon in the primitive Greek religion." Subsequently he founded a school at Crotona, in Southern Italy, that attained to wide influence and celebrity. He was careful to receive only students of character and ability. They lived together as one family or brotherhood, the expense being defrayed from a common fund. The course of study, which was comprehensive, was divided into two parts distinguished as exoteric and the esoteric. It was only after the satisfactory completion of the former preliminary course, which occupied three years, that the student was admitted to the profounder studies of the esoteric course, and to a closer fellowship with the great master himself.

Pythagoras was not very far from grasping the true idea of education. The key-note of his system was harmony. He wished to introduce into human life the harmony which he discovered in the universe at large, and which produced the music of the spheres. He aimed at harmony of body and soul; harmony between parents and children; harmony in social life; harmony between man and God. He recognized the innate evil tendencies of our nature which generate discord; and in education he sought a remedy. "At birth," says

Karl Schmidt, in summarizing the views of Pythagoras on this point, "man is very imperfect, and naturally inclined to arrogance; through an uninterrupted education, lasting throughout the whole life, he must be freed from these innate evils, and be elevated to purity of heart and mind. Early training to abstinence in eating, sleeping, and speaking, to temperance in all particulars, to mutual improvement through hearty friendship, and profound scientific culture, lead in this direction. The work of man on earth is to attain to true knowledge—to knowledge of those subjects which in their nature are unchangeable and eternal. And wisdom has no other end than to free the human spirit through instruction from the slavish yoke of sensual desires, to conduct it to a likeness with God, and to make it worthy to enter hereafter into the fellowship of the gods. As for all things, so also for men, harmony is the end of life."

The course of study in the school of Pythagoras embraced mathematics, physics, geography, metaphysics, and medicine. Especial prominence was given to mathematics, which Pythagoras regarded as the noblest science. Number governed the creative processes in the beginning, and is involved in all cosmical motion and phenomena. The devotion of Pythagoras to this science was not fruitless. To him we owe the discovery of the geometrical truth that the square of the hypotenuse of a right-angled triangle is equal to the sum of the squares of the other two sides.

Religion formed the basis of moral action. Pythagoras, by a profound insight into nature, reached the conception of one God, the universal Ruler. Him it is

the duty of man to serve. Religious ceremonies were prominent in the school at Crotona ; and morning, noon, and night, offerings were regularly made. Temperance, courage, obedience, fidelity, and moral purity were among the virtues constantly enforced by precept and exacted in practice. Pythagoras believed in the metempsychosis or transmigration of the souls of deceased men into the lower animals. On one occasion, seeing a dog beaten and hearing him howl, he desired the striker to desist, saying, "It is the soul of a friend of mine, whom I recognize by his voice." Ovid represents Pythagoras as saying :

What then is death, but ancient matter dressed
In some new figure and a varied vest ?
Thus all things are but altered, nothing dies ;
And here and there the unbodied spirit flies,
By time, or force, or sickness dispossessed,
And lodges where it lights in man or beast.

Much stress was laid upon music because of its harmonizing influence upon the soul. At night the passions of the day were banished by song ; and in the morning, song gently incited to the duties of the day.

The method of instruction was dogmatic. The assertion of Pythagoras was held as a sufficient test of truth. This circumstance gave rise to the expression *ipse dixit*—he himself said it—which put an end to all discussion. In many particulars, the system of Pythagoras showed its affinity with the Doric spirit. It was strict in morals ; severe in discipline ; partial to physical training ; authoritative in method ; and aristocratic in tendency. It was this last fact that brought the school into disfavor, and then into open conflict with the

masses of Crotona. At length the building in which Pythagoras taught was set on fire by a mob; and whether he escaped by flight or perished in the flames is uncertain. This was the end of the school which for a considerable period had exerted a strong moral, intellectual, and political influence in Southern Italy.

(C.) ATHENS.

Attica was a small but beautiful district in Central Greece. In size it was hardly equal to one of our counties; and, at the time of its greatest prosperity, it did not number more than half a million people, of whom nearly four hundred thousand were slaves. Though insignificant in size and population, it was in Athens, the capital of Attica, that the restless and brilliant genius of the Greek wrought out the most perfect form of heathen civilization. Nowhere else in Greece did education, both in its theoretical and practical aspects, attain so high a development.

The beautiful was an object of constant endeavor in Athenian life. The taste was highly cultivated. The city was filled with model statuary; the drama received a frigidly chastened form; the Acropolis was crowned with architectural magnificence. A beautiful soul in a beautiful body—this was the chief end of Attic education. It was attained by a harmonious union of physical and intellectual culture. This conception of the purpose of education is indeed incomplete; but it has the merit of laying stress upon important elements that in other ages and countries have been too often neglected. The educational system of Athens has produced results that are worthy of admiration.

The prosperity of Athens dates from the time of Solon, who lived in the sixth century before Christ. He was counted among the seven sages of Greece, and was the lawgiver of Athens, as Lycurgus was of Sparta. Appointed to draft a constitution to replace the cruel code of Draco, he established laws noted for their wisdom and humanity. Parents were forbidden to sell or pawn their children—an unnatural and barbarous custom previously tolerated. Education was encouraged. In addition to intellectual training, the youth were required to learn a business or trade that would serve as a means of livelihood. Any father that neglected to give his sons a practical training, forfeited all claims upon their support in his old age. This measure of Solon's laid a solid foundation for the prosperity of the state, and brought labor into honor at a time when it was generally held dishonorable.

But we pass to the time of Pericles, the golden age of Greece, for the closer study of Attic education. The social condition of Athens, Pericles himself has portrayed in his famous funeral oration. "We enjoy," he says, "a form of government which does not copy the laws of our neighbors; but we are ourselves rather a pattern to others than imitators of them. In name, from its not being administered for the benefit of the few but of the many, it is called a democracy; but with regard to its laws, all enjoy equality, as concerns their private differences; while with regard to public rank, according as each man has reputation for anything, he is preferred for public honors, not so much from consideration of party as of merit; nor, again, on the ground of poverty, while he is able to do the state any good service, is he

prevented by the obscurity of his position. . . . Moreover, we have provided for our spirits the most numerous recreations from labors, by celebrating games and sacrifices through the whole year, and by maintaining elegant private establishments, the gratification daily received from which drives away sadness. Owing to the greatness too of our city, everything from every land is imported into it; and it is our lot to reap with no more peculiar enjoyment the good things which are produced here, than those of the rest of the world likewise."

In Attica, only the freemen, who constituted about one fifth of the population, were allowed the advantages of education. Female education was neglected. The wife was servilely subject to the husband. As a rule, it was only women without character who sought to increase their charms by intellectual culture. The state had no further connection with education than to maintain a general supervision over the schools, and to provide gymnasia for the physical training of the youth. Education was an individual interest; and it was left to the wisdom or ability of the father to determine what culture his sons should receive. But, as the popular sentiment was highly favorable to the cause of learning, education was general among the freemen. Even those who received no formal school-training, were not left wholly without culture; for, in the democratic city of Athens, the people mingled freely together, and the numerous works of art had an elevating influence.

The education of the Athenian youth extended through eighteen years, which were divided into three nearly equal periods. The first period included the do-

mestic training. Among the poor, the mother was the teacher; but among the wealthy, nurses were employed. These had entire supervision over the child, and were its constant companions. It is interesting to know that the children of Athens more than two thousand years ago were entertained by the same devices in use to-day, among which may be named rattles, dolls, swings, balls, stick-horses, little wagons, and toy houses and ships.

The boyhood education began with the seventh year. The boy was then removed from the nurse's care, and placed under the charge of a pedagogue, usually an aged and trustworthy slave, under whose care he remained throughout the rest of his education. The pedagogue performed the important functions of servant, guardian, counselor, and moral censor. He attended his charge in walks and amusements, and accompanied him to and from school. Instruction was given by private teachers. The better class occupied comfortable rooms in which they received their pupils; while those without means imparted instruction in public places, receiving but little remuneration. Reading and writing were the subjects first studied. In teaching reading, the Athenian instructor employed the alphabetic system, and encountered all the difficulties growing out of the dissimilarity between the names of the letters and their sounds as combined in words and syllables. A wax tablet and stylus were the earliest writing-materials. The pupil imitated a copy set by the teacher. After these elementary studies were sufficiently mastered, arithmetic, grammar, and literature were taken up. The "Iliad" and the "Odyssey" were among the earliest reading-books of

the Greek. These, with other poetical and prose works, were carefully studied, extended portions being copied with the pen, and memorized for declamation. Geography was learned chiefly from the second book of the "Iliad," which contains the well-known catalogue of ships, and describes the various districts from which the Grecian forces came.

At the age of twelve or fourteen, the sons of the poor usually relinquished study, in order to learn a trade or engage in work, while the sons of the wealthy entered upon a higher course, embracing grammar, poetry, music, rhetoric, mathematics, and philosophy. Much of this higher instruction was given in the gymnasia, which, at first, places of physical exercise only, became at length centers of intellectual culture also.

A gymnastic training ran parallel with mental culture through its whole extent. This training was given by private teachers in their own or in public gymnastic schools. The elementary gymnastic schools, designed exclusively for boys, were called *palæstra*. Here the exercises consisted in running, jumping, wrestling, and other similar sports. The art of swimming was almost universal. "He knows neither the alphabet nor swimming," was a Greek expression for an ignoramus. The later physical training was received in the state gymnasia. The exercises assumed a more manly character, and consisted of leaping, running, wrestling, throwing the javelin, and hurling the discus or quoit. This was the classic course of gymnastics, and is known by the name *pentathlon*. The gymnastic discipline of Athens had a different purpose from that of Sparta. The Athenian sought beauty of body; and with what success, the

model forms of Grecian statuary bear lasting witness. The Spartan aimed at strength and endurance; but, in connection with these qualities, he often developed a coarseness that appeared to the refined Athenian taste almost brutal.

Music formed an important part of education. It was believed to exert a very ennobling influence upon the mind and character. Poems were set to music and sung. The principal musical instrument was the cithara, a stringed instrument corresponding to the modern guitar, to which it has given name. The flute, though always used at banquets and public festivals, was less popular, because it distorted the face and was unsuited to vocal accompaniment. "He who followed music as a profession," says Falke, "was looked upon as a mere laborer, and enjoyed but little respect; but, as a part of education and culture, singing and playing the cithara were an ornament to the freeman. Already, in Homer's day, Achilles sang and played; and to Epaminondas, the disciple of philosophers, the victorious leader of state and army, it was imputed as an honor that he was a good musician, and even dancer. Music was not introduced into the schools as a means of pleasure and amusement; but it was supposed to have a purifying and educating power. It was studied for the elevating influence which it exerted upon the soul."

The moral education of the Athenian was defective. It lacked a true religious basis. The gods of the Greeks were merely deified men, beautiful, indeed, in body and mind, but stained with ignoble passions. The Greek could not rise above his gods. In many points, however, the moral education of Athens is worthy of com-

mendation. Patriotism and courage, respect for the religious rites of the city, modesty and urbanity of manner, a constant regard for outward propriety, were carefully inculcated. The refined taste of the Athenian abolished grossness from his vices; and, like the Parisian, his counterpart in the modern world, he sinned in an æsthetic way.

At eighteen the youth entered the military service of the state. They were placed as guards at frontier posts, and were subject to severe discipline. Two years later they were formally enrolled among the voters, and admitted to the privileges of full citizenship. The oath administered on this occasion was as follows: "I will not bring reproach upon our sacred arms, nor desert the comrade at my side, whoever he may be. For our sanctuaries and laws I will fight alone or with others. My country I will leave, not in a worse, but in a better condition. I will at all times submit willingly to the judges and established ordinances, and will not consent that others infringe or disobey them. I will honor the established religious worship. The gods be my witness!"

Athenian education, though far above any system preceding it, is by no means ideal. Its fundamental idea is not correct. The beautiful, as an æsthetic conception, is not the supreme end of life. The moral and the useful are of higher significance. The worth of man was not fully grasped in Attica. Slaves were excluded from all education, and women were held in servile subordination. Education in Athens was particularistic. Its aim was not a manhood of typical and universal perfection, but the beautiful Athenian; and

hence it had not breadth enough to become the educational system of our race.

The system of Athens has been called *æsthetic education*.

(D.) SOCRATES.

After the Persian war, Athens declined. This naturally affected education. The teachers degenerated into sophists, who were less concerned about depth of knowledge than beauty of style, and less occupied with truth than with plausibility. This unmanly and dishonest superficiality was vigorously opposed by Socrates, one of the most eminent characters of Grecian history. He was born at Athens, 469 B. C., his father being a sculptor. Socrates pursued the same occupation for some years with success; but he subsequently relinquished it to devote himself to study. His personal appearance was unattractive; "his projecting eyeballs, his depressed nose, with upturned and dilated nostrils, his large, unwieldy body, gave to his whole appearance somewhat of the satyr, altogether in keeping with the tone of his discourse, which not seldom breathed forth a vein of latent mockery, and pursued, with bitter expressions of scorn and irony, every arrogant pretender to wisdom and virtue." He possessed a strong body, and was capable of great endurance. He took part in the Peloponnesian war as a heavy-armed soldier, and won the admiration of his associates by his strength and courage. His wife Xanthippe was a notorious scold, for which, no doubt, she had too much occasion; but he endured her railing with a truly model patience and resignation.

offensive to the Athenians ; at length an indictment was brought against him in these terms : " Socrates is guilty of crime—first, for not worshipping the gods whom the city worships, and for introducing new divinities of his own ; next, for corrupting the youth. The penalty due is death." The trial took place before a court of five hundred and fifty-seven judges. Socrates might easily have disproved the charges, but he conducted his defense in such a preposterous and exasperating manner that he was found guilty and condemned to death by poison. He refused to make his escape from prison. The last day of his life he spent in discoursing with his friends upon the immortality of the soul. When the hour of death came, he quietly drank the hemlock, and passed away with the calmness and dignity becoming the philosopher.

Xenophon concludes his " *Memorabilia* " of Socrates with these words : " Of those who knew what sort of a man Socrates was, such as were lovers of virtue, continue to regret him above all other men, even to the present day, as having contributed in the highest degree to their advancement in goodness. To me, being such as I have described him, so pious that he did nothing without the sanction of the gods ; so just, that he wronged no man even in the most trifling affair, but was of service, in the most important matters, to those who enjoyed his society ; so temperate, that he never preferred pleasure to virtue ; so wise, that he never erred in distinguishing better from worse, needing no counsel from others, but being sufficient in himself to discriminate between them ; so able to explain and settle such questions by argument ; and so capable of discerning the

character of others, of confuting those who were in error, and of exhorting them to virtue and honor—to me, I say, he seemed to be such as the best and happiest of men would be. But if any one disapproves of my opinion, let him compare the conduct of others with that of Socrates, and determine accordingly.”

(E.) PLATO.

The most distinguished pupil of Socrates was Plato. This philosopher, born in the year 429 B. C., traced his descent to Solon, and Codrus, an ancient king of Athens. In youth he received a careful education, and devoted himself for a time to poetry; but, after becoming acquainted with Socrates in his twentieth year, he gave himself up wholly to the study of philosophy. In pursuit of knowledge, he traveled in Egypt, and then in Italy, where he visited the school of Pythagoras. At length, after many changes of fortune, he returned in his fortieth year to Athens, his native city, and devoted himself to gratuitous teaching. With his philosophy, which was idealistic, we have nothing to do.

“Plato,” says Lewes, “was intensely melancholy. That great, broad brow, which gave him his surname, was wrinkled and somber. Those brawny shoulders were bent with thought, as only those of thinkers are bent. A smile was the utmost that ever played over his lips; he never laughed. ‘As sad as Plato,’ became a phrase with the comic dramatists. He had many admirers—scarcely any friends. In Plato, the thinker predominated over the man. That great, expansive intellect had so fixed itself upon the absorbing questions

of philosophy that it had scarcely any sympathy left for other matters."

To Plato belongs the honor of first subjecting education to a scientific examination. This he does in his "Republic"—a Utopian work sketching an ideal state, yet containing withal many noble thoughts. Though possessing considerable interest, his views remained without any perceptible effect upon Grecian education, and may therefore be passed over briefly.

According to Plato, the soul consists of three parts: "1. The appetite, which is wild, but capable of being tamed; 2. The spirit, the element of courage, which may be enlisted on the side of either good or evil; 3. The philosophic element"—the source of wisdom, culture, and love. "The duty of education is to control the appetite, and so to balance the other elements of the soul that each may tend to the perfection of the other."

Plato made education the business of the state, reminding us of the Persian and Spartan systems. All interests, whether of the family or of the individual, were subordinated to the state. A community of wives, children, and property was advocated. A caste system was proposed, the people being divided into rulers, warriors, and common people. Of these, only the first two were to be educated. Moral education was made prominent. Tales and myths were to be made vehicles of moral instruction, and whatever in poetry or sculpture tended to immorality was to be rigidly excluded from the state. The cardinal virtues were courage, truthfulness, self-control, honor to parents, and love for one's fellow-citizens. The course of study embraced arithmetic, geometry, astronomy, harmonics, and philosophy

which was looked upon as the queen of all sciences. Gymnastics was commended, not simply for bodily development, but also for its happy influence upon the soul. Dancing was added to the classical cycle of gymnastic exercises, though such forms as might be prejudicial to good morals were condemned. Music was highly commended. Dramatic and epic poetry were to be banished from the republic. "To lyric poetry," says Ritter, "he is more favorably disposed, but requires that it, abstaining from all seductive ornament or sentiment, and recommending nothing indecent or unbecoming, should only sing, with due reverence, the praises of gods and heroes. This species of poetry he allows to be cultivated in the state under the direction of authority, which is experienced in good." *

(F.) ARISTOTLE.

We conclude our inquiry with a study of the profoundest thinker that Greece produced. This is Aristotle, whom an able German writer has called "the Alexander of the intellectual world." He was born at Stagira, in Macedonia, 384 B. C. In youth he went to Athens, where he was a member of Plato's school for twenty years. His eminent abilities soon became the subject of remark, and he was called by the philosopher "the intellect of his school." Unlike his great theorizing teacher, Aristotle was a careful and practical investigator, and he succeeded by his genius and industry in compassing the whole circle of knowledge as it then existed. He created the science of logic, and made valuable contributions to many other departments of learning.

At the age of forty-seven, when his fame as a philosopher had become established, he was appointed teacher of Alexander the Great. He enjoyed the highest esteem of both Philip and Alexander, and received at their hands many marks of distinguished favor; among these may be mentioned the restoration of his native town, Stagira, which had been destroyed by war, and the erection there of a gymnasium for his philosophical lectures. Though having the royal pupil under his charge less than four years, he did much in molding his mind and character, and the effects of his teaching were afterward discernible in the conqueror's life.

When about fifty, Aristotle returned to Athens and opened a school known as the Lyceum. He lectured to a circle of disciples as he walked about the shady avenues; and this fact has given to his school of philosophy the name Peripatetic. In the morning he gave to select pupils a lecture upon some abstruse subject; in the afternoon he delivered a popular lecture to a wider circle of hearers. "As to the unfavorable reports of the character of Aristotle," says Ritter, "we have already weighed the greater part of them; they by no means justify any imputation of low or dishonorable feelings. In his works, on the other hand, we see him the calm and sober inquirer, who does not, like Plato pursue a lofty ideal, but keeps carefully in view the proximately practicable, and is not easily misled into any extravagance, either of language or of thought. His principal object is to examine truth under all her aspects, never to step beyond the probable, and to bring his philosophical system in unison with the general

opinions of men, as supported and confirmed by common sense, observation, and experience."

Notwithstanding his greatness, Aristotle was hemmed in by the limitations of his age. The end of education with him is the useful and happy citizen. While attaching undue importance to the state, as Plato had done, he still recognized, in some degree, the rights of the family and the individual. The state was to maintain a general supervision over education, while the details were to be left to individual preference and judgment. According to the prevalent view of the time, women and slaves were to be shut out from the benefits of education. The order of education should be—1. Physical; 2. Moral; 3. Scientific. The purpose of physical training, however, was not, as in Sparta, the development of brute force, but the production of healthful vigor and manly courage. In moral education, correct habits were to precede theoretic teaching, the child being brought up in the exercise of the virtues that were to form later the matter of precept. Dialectics, or the art of disputation, was the basis of scientific training, since it served as a mental gymnastic and led to the acquisition of the philosophic sciences. Drawing was insisted on as a useful means of developing the sense of the beautiful. Mathematics in its higher forms, as having no connection with the moral nature of man, was not regarded as of much importance. Rhetoric, philosophy, and politics received due attention. "Music, accompanied with singing, so far as it is subservient to education, ought to be encouraged by reason of its great influence on manners, in which respect, however, its application is very narrow. But it has other uses; it tends

to purify the passions of the soul, as is especially the case with tragedy, and is good for recreation and for a resource in leisure." The acquisition of knowledge was looked upon as naturally agreeable, and the method of proceeding from the known to the unknown, from the concrete to the abstract, was clearly pointed out.

The theories of these three great thinkers, Socrates, Plato, and Aristotle, made no visible impress upon the educational practice of their time. This study of their views has been interesting and necessary only as showing the height to which the heathen intelligence could attain. The educational theories of these philosophers are of no great use to us, except as containing here and there a valuable hint and preparing the way for a full-orbed conception of education. The heathen world could not produce a system of education suited to the wants of Christian civilization.

2. *ROME.*

Ancient Rome has a history extending through more than a thousand years. During this long period it passed through various stages of development. From a condition of weakness and barbarism, it rose to be the imposing mistress of the world and the chief representative of human progress. It gathered into its arms the elements of Grecian and Oriental culture, and, as its end drew nigh, it scattered them freely over the rest of Europe. Rome has been the bearer of culture to the modern world. To trace the course of education through the whole extent of Roman history would prove tedious, and bring us no compensating advantage. Our inquiry

must be limited to a single typical period. This we find in the age of Augustus, when Roman character and Roman culture produced their richest fruits. It is the age of Cicero and Virgil.

Roman character, which lies at the basis of Roman history and culture, deserves a passing word. It is in striking contrast with Grecian character. Both are interesting, but one-sided and defective. The Greek, with his restless, lively, emotional nature, was æsthetic, worshipping the beautiful; the Roman, with his rugged strength, was practical, reverencing the useful. These types of character are complementary of each other; and when united and ennobled by Christianity, they present the highest form of manhood.

The Roman, no doubt, received from nature something of this practical tendency, which was afterward fostered by outward circumstances. The small colony that first settled on the banks of the Tiber was hemmed in by hostile communities. Freedom of development was repressed. Unless they consented to give up their individuality, or perhaps their very existence, the Romans were forced to conquer a place in Italy. This necessity called forth an aggressive, warlike spirit; and at the same time it awakened an ardent patriotism and thrifty industry. These are the factors which produced Rome's prosperity. To the Roman, life was serious; his manner was stately and grave. The finest feelings of humanity, the domestic and social affections, the refined pleasures of literature and art, were sacrificed for the sterner duties of framing laws, constructing aqueducts and highways, declaring wars, and leading armies. The spirit of conquest characterized the Romans, and

made them utilitarian in all their views and aims. Utilitarianism determined education. "The children of the Romans," says Cicero, "are brought up that they may some time be useful to the country, and hence they should be taught the nature of the state and the regulations of our forefathers. Our country has borne and educated us on the condition that we consecrate to its service the best powers of our spirit, talent, and understanding; therefore we must learn the arts through which we can serve the state, for I hold that to be the greatest wisdom and the highest virtue."

The family life of Rome marked a notable advance over that of Greece and the Oriental countries. The worth of woman began to receive proper recognition. Polygamy was not tolerated. In theory, the husband was unlimited master, and even held the right of life and death over his children; but, in practice, the wife, by her virtues and tact, softened the sternness of his authority and arrived at undisputed control in the household. The type of womanhood produced in the best days of Rome was admirable. Its leading traits were attractive dignity, strong motherly instincts, and lovely domestic virtues. Not diamonds or pearls, but her two rosy-cheeked boys, were Cornelia's most precious jewels. The Roman matron managed her household tastefully and frugally, and found delight in caring for her children. For the first six or seven years she was their only teacher; and with the utmost fidelity she formed their language, ideas, and moral sentiments. It was not till the age of degeneracy had set in that Roman mothers intrusted their children to nurses and pedagogues.

Elementary instruction in school began with the

seventh year, and embraced reading, writing, and arithmetic. The teacher of the primary school was called *literator*. The general custom was to teach the names and order of the letters before their forms—a method that Quintilian properly criticises. In connection with spelling and reading, great care was bestowed upon pronunciation. By degrees the easier poets were read and explained, and choice passages were learned by heart. Writing was taught by inscribing a copy on a waxen tablet or board, and allowing the pupil to follow the outline of the letters with the stylus. After reading and writing came the art of reckoning, to which importance was attached because of its value in business. The fingers and an abacus of pebbles were extensively employed; and, through repeated mental exercises, the pupil was accustomed to compute with rapidity. In one of his odes, Horace presents us a picture of boys passing along the streets of Rome with slate and satchel, not unlike what may be seen in the modern town.

The school regulations were exacting, and the discipline was sufficiently severe. Obedience and modesty were looked upon as important qualities. The pupils were required to be neat in dress and cleanly in person, and to observe a quiet decorum. On entering the school-room, they greeted the teacher with a respectful salutation. Corporal punishment was employed. The ferule was the ordinary instrument of punishment; but, in case of grave faults, the rod or whip was also used.

The primary training of the child ended with the twelfth year, when he was handed over to the *literator* in order to receive more advanced instruction. The

Greek language was taken up, and grammar was carefully studied. For the culture of the understanding, the best writers, particularly the poets, were employed, among whom may be mentioned Homer, Virgil, Æsop, and Cicero. Poems and orations were committed to memory. Especial importance was attached to history, and several Romans have won celebrity by the extent and accuracy of their historical knowledge. Poetry, oratory, philosophy, and criticism were other subjects studied under the *literator*.

The schools were private enterprises. The teachers of the primary schools did not stand in high esteem, as the *literator* was often a person who had failed in other callings. The *literati*, however, were frequently able to attain to wealth and distinction, especially if they were called to the instruction of the imperial princes. The public schools were not generally patronized by the higher classes of society. The moral tone of these schools was low; and the vitiated air, with which the rooms were filled, was felt to be prejudicial to health. Hence it was common to employ private tutors; or, as in the case of Æmilius Paulus, the conqueror of Macedonia, to keep Greek teachers permanently attached to the house.

At fifteen or sixteen, the young Roman assumed the dress of manhood, known as the *toga virilis*. It devolved upon him to choose his calling, and to direct his subsequent studies in reference to it. Agriculture, arms, politics, law, and oratory were open to him. In his choice the young Roman, with his utilitarianism, was determined more by the prospect of accumulating wealth than by the dignity of the calling. Agriculture,

which was held in great esteem, was selected by those who lacked ability to achieve success in other pursuits. The art of war was acquired in the field; politics, law, and oratory were learned in the forum, courts, and senate, under the guidance of some distinguished patron. Eloquence, as the surest road to popularity and success, was studied with assiduity. Theory and practice were combined. A wide course of reading was pursued in this connection; for, according to a saying of Cicero's, the orator ought to know everything.

Such is a history of education in Rome during the golden age. It is the period which followed the subjugation of Greece, and the absorption of Grecian literature and art. It stands in decided contrast with the rough simplicity of the earlier and purely Roman civilization, which was intensely utilitarian, and hostile to the highest forms of culture. The elder Cato may be regarded as the embodiment of this earlier Roman spirit. He used his influence to repress the influx of Grecian learning. He wrote to his son: "Believe me, as if a prophet had said it, that the Greeks are a worthless and incorrigible race. If this people diffuse their literature among us, it will corrupt everything." His fears, not of the literature of the Greeks, but of their vices, were only too well founded; and as has happened at later periods in the world's history, brilliant culture went hand in hand with deep moral degradation. The educational practice of this earlier period is well exemplified by Cato. As Plutarch tells us, this sturdy Roman taught his son to read, "although he had a servant, a very good grammarian, called Chilo, who taught many others; but he thought not fit, as he himself said, to

have his son reprimanded by a slave, or pulled, it may be, by the ears when found tardy in his lesson; nor would he have him owe to a servant the obligation of so great a thing as his learning; he himself, therefore, taught him his grammar, law, and his gymnastic exercises. Nor did he only show him, too, how to throw a dart, to fight in armor, and to ride, but to box also, and to endure both heat and cold, and to swim over the most rapid and roughest rivers. He says, likewise, that he wrote histories, in large characters, with his own hand, that so his son, without stirring out of the house, might learn to know about his countrymen and forefathers; nor did he less abstain from speaking anything obscene before his son, than if it had been in the presence of the sacred virgins, called vestals."

In completing this sketch of Roman education, which has been called *practical*, it only remains to present the views of two or three distinguished Romans who have treated of the subject in their writings.

(A.) CICERO.

Cicero, the distinguished orator and philosopher, is perhaps the best representative of his age, combining in himself the highest Roman and Grecian culture. Born in the year 106 B. C., of a noble family, he was educated at Rome under the best teachers of the time. At sixteen he assumed the manly gown, and studied law, oratory, and philosophy. He afterward traveled in Greece and Asia for the purpose of study. At Rhodes he studied oratory with Apollonius, a celebrated rhetorician, at whose request he once delivered a declamation in Greek. When he had finished, the auditors were

profuse in their praises; but Apollonius, after maintaining a sorrowful silence for a time, said: "You have my praise and admiration, Cicero, and Greece my pity and commiseration, since those arts and that eloquence, which are the only glories that remain to her, will now be transferred by you to Rome." After his return to Italy, he filled several important offices, among them the consulship, in which his services were so eminent that he received at the hands of his grateful countrymen the proud title of "father of his country." At last, after many changes of fortune, he was murdered by emissaries of Antony, against whom he had delivered a series of philippics.

The character of Cicero has been admirably portrayed by Ritter: "With the nicest knowledge of men and things, without which no orator can be great, he combined a fine sense of justice and benevolence, love for his friends, who remained true to him through the various changes of his fortunes; unwearying diligence, and a shrewd and comprehensive forecast of future events, and the inevitable consequences of the present position of affairs. To be as great as he was brilliant in political life, he only wanted that perfect enthusiasm which is engendered in the mind by confidence in its own resources, and resolute firmness in the moment of action."

During his later years, Cicero employed his leisure in writing a number of philosophical works, in several of which he has set forth more or less completely his views of education. He demanded of teachers that they should be just, and neither too mild nor too severe. Punishment should be resorted to only after other means

of discipline have failed; it should have nothing degrading in its form, and should never be administered in anger, as it is then impossible to observe moderation. The pupil should be made to feel that correction springs from the desire to do him good. Cicero held noble views of man. "The man who knows himself," he says, "will find within himself traces of the divine; and, while he considers himself an image of the Deity, he will be careful to avoid those feelings and actions which would injure this great gift. . . . The soul is derived immediately from the Deity. It retains ties of relationship with celestial beings; and hence it comes to pass that, amid all animated nature, man is the only creature which possesses the knowledge of a Supreme Being. The possession of this knowledge is, then, sufficient to entitle man to point to his upward origin. Nature has placed in us certain necessary and elementary notions, which form the basis of all true wisdom and science." Education should begin with the earliest childhood; and during this sensitive period the amusements and surroundings should be favorable to refinement and intelligence. The memory should be cultivated; and, to this end, extracts from Grecian and Roman writers should be learned by heart. Religion is wisely placed at the basis of moral culture. The young man should choose a calling for which his tastes and abilities fit him. The study of Greek was held important; but the natural sciences, in which Cicero himself was deficient, were but lightly esteemed. The study of politics and philosophy was looked upon as the highest intellectual pursuit.

(B.) SENECA.

Seneca, who has been placed by a distinguished author among the heathen "seekers after God," lived during a period of great moral degeneracy—a fact that renders the purity of his philosophical teachings all the more remarkable. He was born at Cordova, in Spain, two years before the beginning of the Christian era. When quite young he was taken by his father to Rome to be educated. "The things taught," says Canon Farrar, "were chiefly arithmetic, grammar—both Greek and Latin,—reading, and the repetition of the chief Latin poets. There was also a good deal of recitation and of theme-writing on all kinds of trite historical subjects. The arithmetic seems to have been mainly of a very simple and severely practical kind, especially the computation of interest and compound interest; and the philology generally, both grammar and criticism, was singularly narrow, uninteresting, and useless. Of what conceivable advantage can it have been to any human being to know the name of the mother of Hecuba, of the nurse of Anchises, of the step-mother of Anchemolus, the number of years Acestes lived, and how many casks of wine the Sicilians gave to the Phrygians? Yet these were the despicable *minutiæ* which every schoolmaster was then expected to have at his fingers' ends, and every boy-scholar to learn at the point of the ferule—trash which was only fit to be unlearned the moment it was known. For this kind of verbal criticism and fantastic archæology Seneca, who had probably gone through it all, expresses a profound and very rational contempt."

After traveling some time in Greece and Egypt,

Seneca returned to Rome and pleaded in the courts of law, meeting with eminent success. He was subsequently banished to Corsica for eight years, which period he spent in philosophical studies. "There is no land," he wrote at this time, "where man can not dwell—no land where he can not uplift his eyes to heaven; wherever we are, the distance of the divine from the human remains the same. So, then, so long as my eyes are not robbed of that spectacle with which they can not be satiated, so long as I may look upon the sun and moon, and fix my lingering gaze on the other constellations, and consider their rising and setting and the spaces between them and the causes of their less and greater speed—while I may contemplate the multitude of stars glittering throughout the heaven, some stationary, some revolving, some suddenly blazing forth, others dazzling the gaze with a flood of fire as though they fell, and others leaving over a long space their trails of light; while I am in the midst of such phenomena, and mingle myself, as far as a man may, with things celestial—while my soul is ever occupied in contemplations so sublime as these, what matters it what ground I tread?"

Upon his recall to Rome, he was appointed tutor to Nero; but, in spite of the excellence of his instruction, he was unable to control the depraved passions of his pupil. He was finally condemned to death in the year 65 A. D.—a standing testimony to the injustice and corruption of his age.

Some of Seneca's teachings are in striking accord with Scripture truth. "God is near us," he says; "he is in us. A divine spirit dwells within us who watches over us and observes our evil and our good. . . . With-

out God, no man can be good." He believed that man is naturally inclined to evil. It is the office of education to correct the evil tendencies of our nature. The teacher should exert a purifying and elevating influence upon his pupils, leading them by precept and example to virtue. In punishment there should be no anger, which destroys the benefit of chastisement. "Who condemns quickly," Seneca says, "condemns willingly; and who punishes too much, punishes improperly." In dealing with pupils, differences of character should be taken into consideration. The destiny of man is thought and action; and both capacities should be cultivated. A multiplicity of studies, ending in superficiality, should be avoided, and thorough work in a narrow compass insisted on. The study of nature was regarded as important; for it is here that the works of the Deity are investigated and wisdom acquired for the proper ordering of life. Gymnastics was held as serviceable when pursued with moderation; but, when employed to form the athlete, it was thought to exhaust the mind and render it unfit for study. The faithful and competent teacher stood high in Seneca's estimation. "What the teacher," he says, "who instructs us in the sciences imparts to us in noble effort and intellectual culture is worth more than he receives; for, not the matter, but the trouble; not the desert, but only the labor, is paid for."

(C.) QUINTILIAN.

Quintilian, the celebrated writer on rhetoric, was born at Calahorra, in Spain, about the year 42 A. D.; and, like most other great men of his time, he was educated

at the metropolis. He devoted himself for a time to the practice of law, in which he achieved considerable success; but he finally abandoned this calling to become a teacher of oratory, in which he won a high and enduring reputation. He was invested by Vespasian with consular dignity, and granted an allowance from the public treasury. He was the first Roman teacher that was salaried by the state and honored with the title "professor of eloquence." He taught in Rome for twenty years, and numbered among his pupils many distinguished names. In his later years he wrote his "Institutes of Oratory," in which he has presented a complete scheme of education—the most valuable treatise on the subject that has come down to us from antiquity. He entertained a favorable opinion of the native capacities of children, and admonished parents to cherish the best hopes of their offspring. Nurses should speak correctly and have good morals, as they have charge of children at the most impressible period. The pedagogues subsequently chosen for the children should either be men of acknowledged ability, which Quintilian greatly preferred, or they should at least be conscious of their want of learning, and thus remain themselves docile. Children should begin with the Greek language, as they would naturally acquire Latin; yet the study of the vernacular should not be long deferred, lest a pure pronunciation be lost. Education should not be postponed, as was customary at that time, till the seventh year, but should begin with the earliest childhood. Amusements should be utilized as means of instruction. Care should be exercised not to give the child a distaste for learning. Something can be learned during this

early age ; "and whatever is gained in infancy," Quintilian says, "is an acquisition to youth." The forms and names of the letters should be learned simultaneously ; and whatever devices in the way of playthings might facilitate this knowledge should be employed. Writing should be learned by following copies cut in wood or inscribed in wax. In learning to read, the child should advance slowly, mastering the elements fully. Public schools should be preferred to private instruction ; for, without exposing pupils to any greater danger, they supply the stimulating influence of association, friendship, and example. The disposition and ability of each pupil should be studied. Precocity is often deceptive, lacking solidity and endurance. Integrity and self-control should be taught early. "That boys should suffer corporal punishment," Quintilian says, "I by no means approve ; first, because it is a disgrace, and a punishment for slaves ; . . . secondly, because if a boy's disposition be so abject as not to be amended by reproof, he will be hardened, like the worst of slaves, even by stripes ; and, lastly, because, if one who regularly exacts his tasks be with him, there will not be the least need of any such chastisement." Under the *literator*, the pupil should pursue grammar, composition, music, geometry, astronomy, and literature. Greek and Latin authors should be read with judicious criticism and all necessary historical explanations. Lastly, the student should pass to the rhetorician to complete his course. Special regard should be had to the moral character of the teacher and to his qualifications. The teacher of eminent abilities is the best to teach little things as well as great things, and he is likely to have a

better class of pupils. Severity in criticism should be avoided. "I used to say," Quintilian tells us, "with regard to some compositions, that I was satisfied with them for the present, but that a time would come when I should not allow them to produce compositions of such a character." The natural tastes and capacities of pupils should be regarded, though not to too great an extent. We should strengthen what is weak and supply what is deficient.

III.

CHRISTIAN EDUCATION BEFORE THE REFORMATION.

1. THE RELATION OF CHRISTIANITY TO EDUCATION.

THE education of paganism was imperfect. It was controlled by wrong principles, and confined within too narrow limits. It did not grasp the worth of the individual in all its fullness. It never freed itself from the narrowness of national character. Grecian education aimed at forming the beautiful Greek; Roman education, at forming the practical Roman. But, with the advent of Christ into the world, there came a new era in history. New truths were thrown into the world which were destined to change its character. "In lowliness and humility," says Dr. Philip Schaff, "in the form of a servant as to the flesh, yet effulgent with divine glory, the Saviour came forth from a despised corner of the earth; destroyed the power of evil in our nature; realized in his spotless life, and in his sufferings, the highest idea of virtue and piety; lifted the world with his pierced hands out of its distress; reconciled mankind to God, and gave a new direction to the whole current of history." With his coming, the world started upon the period of its final development. When

the truths announced by him have exhausted their force upon mankind, then comes the end.

The wide-reaching influences of Christianity have profoundly affected education. Christianity has placed education upon a new and immovable foundation. In teaching that God is the common Father of all men, it removes from education the fetters of national limits and prejudices. It gives the world the great thought of the brotherhood of mankind—a thought whose benign effects have not yet been fully realized. In making every one a child of God, stamped with the impress of the divine image, Christianity attaches due importance to the individual. It makes him the object of redemption, the steward of God, the heir of eternal life. He is made to possess an endless worth in himself. Christianity teaches that all men are alike before God, who “is no respecter of persons.” With this mighty truth, it sweeps away the false distinctions of class and caste which have weighed so heavily upon Oriental countries. It abolishes slavery. In enforcing the law of brotherly love, Christianity seeks to overthrow the injustice and oppressions of society. Inculcating the duty of personal holiness, it seeks to abolish the vices which were sanctioned by the philosophy, religion, and society of the ancient world, and which polluted and undermined Grecian and Roman civilization. It elevates marriage into a divine rite. It makes the wife the friend and companion of her husband, their union symbolizing that of Christ with his Church. Children are looked upon as the gift of God. Christ took them up in his arms and blessed them. So far from having the right to expose his children to death, according to the universal custom

among pagan nations, the parent is required to "bring them up in the nurture and admonition of the Lord." These are some of the great truths of Christianity which have changed the character both of civilization and of education.

2. *THE FOUNDER OF CHRISTIANITY.*

The life of Christ, apart from its religious significance in the world's redemption, is well worth a careful study. It is now nearly nineteen centuries since his birth. During this vast period, the world has moved forward in its gigantic process of development. The sum of human knowledge has been immeasurably increased, new arts and sciences have arisen, yet the life of Christ stands forth in unapproachable beauty. The greatest minds of modern times, with the docility of the Galilean fishermen, have paid him the tribute of reverent admiration. The brilliant and skeptical Rousseau acknowledged that "the life and death of Jesus Christ are those of a God." The great German, Herder, said, "Jesus Christ is in the noblest and most perfect sense the realized ideal of humanity." No one will deny the intellectual greatness of Napoleon, yet he has said of Christ: "His birth and the story of his life, the profoundness of his doctrine, which overturns all difficulties, and is their most complete solution; his gospel, the singularity of his mysterious being, his appearance, his empire, his progress through all centuries and kingdoms—all this is to me a prodigy, an unfathomable mystery. I defy you to cite another life like that of Christ."

Human life is an unbroken unity, and our early

years, like the infant oak, contain the elements of our future being. As childhood is a peculiarly susceptible and imitative period, the influences and training belonging to it are largely determinative of our destiny. Leaving out of account Christ's divine nature, before which we bow as a mystery, we may trace, as in the case of other men, those influences which contributed to his intellectual and spiritual development.

Nazareth, his native town, is surrounded by an amphitheatre of hills. Flowers grow upon the slopes and in the hollows; birds fill the air with songs; refreshing breezes blow from the sea, and a bright canopy of blue is stretched over the landscape. In the midst of these favorable surroundings, Christ grew up in sympathy with Nature; and, in after-years, he was able to draw wonderful lessons from "the birds of the air and the flowers of the field." As the Jewish system of education had changed but little, the domestic circle at Nazareth was probably his only school. From Joseph he received formal instruction in the Jewish law, while the gentleness and piety of Mary were not without influence in molding his character. He profited, no doubt, by the weekly synagogue service, and, on his annual visits to the holy city, dwelt fondly upon its wondrous associations.

The results of this training, with its deep religious significance, are apparent throughout Christ's subsequent career. At twelve years of age, he confounded the doctors in the temple; afterward he repulsed the repeated assaults of Satan in the wilderness; he vindicated his Messiahship by the testimony of the prophets; he baffled the cunning of the Pharisees by his profound

acquaintance with Scripture. When he taught the people, he called forth the testimony that "never man spake as this man." He announced new and profound spiritual truths. In a word, he raised himself above all others whom millions yet to-day regard as their grandest teachers. Buddha, Confucius, Mohammed—to say nothing of Greek and Roman sages—are not worthy to be compared with Christ.

In his manner of instructing his disciples and the multitudes that gathered around him, Christ has given us valuable lessons in method. His heart goes out toward his hearers in the tenderest sympathy; he "was moved with compassion toward them, because they were as sheep not having a shepherd." His teaching is adapted to the capacity of his hearers, and is usually connected with some outward circumstance that renders it more impressive. He observes the order of Nature, and seeks only a gradual development—"first the blade, then the ear, after that the full corn in the ear." With his disciples, he insists chiefly upon the practical and fundamental truths of religion, building, as it were, a substantial framework in the beginning, which the Holy Spirit was to conduct afterward to a harmonious and beautiful completion. "One finds in his programme," says a French writer, "neither literary studies nor course of theology. And yet, strange as it may seem, when the moment of action arrives, the disciples—those unlettered fishermen—have become orators that move the multitudes and confound the doctors; profound thinkers that have sounded the Scriptures and the human heart; writers that give to the world immortal books in a language not their mother-tongue."

The teachings of Christ which affect education have already been considered. It is true, as Paroz has said, that "Jesus Christ, in founding a new religion, has laid the foundations of a new education in the bosom of humanity. He has exhibited in his own person the perfect moral development toward which we are to tend—a development which the wisdom of the ancients scarcely caught glimpses of—and he has opened to us, by his death and resurrection, by his word and the Holy Spirit, the way toward this ideal. He is indeed 'the way, the truth, and the life,' and we can say of those who would banish him from education and the school what St. Paul said of the Jews hostile to Christ, that 'they are the enemies of the human race.'"

The testimony of Karl Schmidt is no less striking and emphatic: "By word and deed," he says, "in and with his whole life Christ is the teacher and educator of mankind. Henceforth there is no higher wisdom than that exhibited by Christ, that God is a spirit, and that they that worship him must worship him in spirit and in truth; no greater truth than this, that God dwells essentially in man, that God is the true, divine being of man; no diviner duty than this: 'Thou shalt love the Lord thy God with all thy heart, and with all thy soul, and with all thy mind. This is the first and great commandment. And the second is like unto it, Thou shalt love thy neighbor as thyself.' That is absolute truth, doctrine for all time, in the appropriation and realization of which lies the task of mankind, while in the person of Christ himself the absolute example is given as to whither this truth leads, what it accomplishes, and how it appears in taking form."

3. BRIEF SURVEY OF THE PERIOD.

The first period of Christian education extends to the Reformation of the sixteenth century. During this long period Christianity did not completely control society and education. Always encountering determined opposition, and having weak and fallible men as its representatives, it has never achieved faultless results. At first its violent contrast with existing customs and morals, and afterward its union with the state, gave it one-sided tendencies and crippled its efficiency. At a later period, its contact with the uncultured masses of Northern Europe, and its perversion by a self-seeking, political, and often corrupt priesthood, tainted it with superstition and tyranny.

Notwithstanding unfortunate tendencies in the Church during the first period of Christian education, indispensable work was accomplished. The greatest political power of the earth was brought under the influence of Christianity. The young and vigorous nations of the north of Europe, which at a later time were to be the representatives and bearers of Christian culture, were converted to Christianity. The relics of ancient literature, which were to perform an important office in quickening and forming modern Christian culture, were preserved in the monasteries, and multiplied by tireless copyists. The beginnings of popular education were made. A thirst for knowledge was disseminated among the higher classes, and universities were founded as centers of intellectual culture. In part, the course of study, both for primary and secondary

education, was fixed; and the mistakes and one-sidedness of educational effort have remained for our instruction.

It is proper to say a word here in reference to the Teutonic race, which received the precious boon of civilization and Christianity from falling Rome, in order to purify, preserve, and disseminate it throughout the world. The Teutonic tribes, the noblest branch of the great Aryan family, possessed at the beginning of our era certain characteristics that brought them into sympathy with Christianity, and prepared them for its hearty adoption. As compared with the Romans in point of culture, those brave German tribes ranked as barbarous; but, in force of character, purity of morals, and nobility of feeling, they were far above the Romans. They recognized, in a high degree, the worth of the individual, and were warm defenders of personal freedom. They possessed a deep religious nature, and great reverence and love for the truth. Women were held in high esteem. Their respect for marriage and their purity of morals were portrayed by Tacitus, in order to shame the licentiousness of Rome. In addition to all this, the Teutonic races possessed great physical and intellectual vigor, which fitted them to take up the world's development at the point where antiquity, with strength exhausted, had left it. They became the leaders in art, science, commerce, government, religion, and culture, in all which they made new and extended conquests. It is the Teutonic nations that are chiefly to claim our attention hereafter. They are the great leaders in education, as they are in every other weighty human interest.

4. EDUCATION IN THE EARLY CHURCH.

After these general remarks, we proceed to trace the history of education during the period under consideration more in detail. Education in the early Church is first to be considered. We shall discover among the primitive Christians an unmistakable incompleteness in educational training; but, at the same time, we shall find the highest purity of life and the most self-sacrificing devotion that have been manifested, perhaps, in the history of our race. After contemplating the vicious society of heathen countries, and turning even from our own more cultured civilization, it is delightful to consider the beautiful characteristics of the primitive Christian life. With the early Christians, the adoption of Christianity meant the complete exemplification of its precepts in the life. Says Justin Martyr, who was born about the end of the first century, himself one of the most distinguished Christians: "We who once delighted in lewdness now embrace chastity; we who once embraced magical arts have consecrated ourselves to the good and unbegotten God; we who loved above all things the gain of money and possessions now bring all that we have into one common stock, and give a portion to every one that needs; we who once hated and killed one another now pray for our enemies, and endeavor to conciliate those who unjustly hate us. Now, whosoever are found not to live as Christ taught, let it be publicly known that they are not Christians, though they should profess with their tongues the doctrines of Christ."

The marriage relation was almost ideal in its beauty. According to apostolic injunction, marriage between believers only was allowed. Again we let one of the Church fathers speak. Tertullian, who lived in the second century, says: "How intimate the union between believers! Their hopes, their aspirations, their desires, all the same. They are one in faith and in the service of their Lord, as they are also in flesh and in heart. In mutual concord they read the Scriptures, and fast and pray together, aiding and sustaining each other by mutual instruction and encouragement. They go in company to the house of the Lord; they sit together at his table. In persecution and in want, they bear their mutual burdens, and participate in each other's joys. They live together in mutual confidence, and in the enjoyment of each other's society. In the freedom of mutual confidence they administer to the sick, relieve the needy, distribute their alms, and each freely engages in his religious services without concealment from the other. Unitedly they offer their prayers to God, and sing his praise, knowing no rivalry but in these acts of devotion. In such scenes of domestic bliss, Christ rejoices and adds his peace. To two so united he grants his presence; and where he is no evil can abide."

Education among the early Christians has been beautifully portrayed by Coleman. "The tender solicitude of these early Christians for the religious instruction of their children," he says, "is one of their most beautiful characteristics. They taught them even at the earliest dawn of intelligence the sacred names of God and the Saviour. They sought to lead the infant minds of their children up to God, by familiar narratives from Script-

ure, of Joseph, of young Samuel, of Josiah, and of the holy child Jesus. The history of the patriarchs and prophets, apostles and holy men, whose lives are narrated in the sacred volume, were the nursery-tales with which they sought to form the tender minds of their children. As the mind of the child expanded, the parents made it their sacred duty and delightful task daily to exercise him in the recital of select passages of Scripture relating to the doctrines and duties of religion. The Bible was the entertainment of the fireside. It was the first, the last, the only school-book almost, of the child; and sacred psalmody, the only song with which his infant cry was hushed as he was lulled to rest on his mother's arm. The sacred song and the rude melody of its music were, from the earliest periods of Christian antiquity, an important means of impressing the infant heart with sentiments of piety, and of imbuing the susceptible minds of the young with the knowledge and the faith of the Scriptures. Even in the earliest period of Christianity, there were those who, like our divine Watts in modern times, 'condescended to lay aside the scholar, the philosopher, and the wit, to write little poems of devotion adapted to the wants and capacities of children.'"

The purpose of these early Christian parents, as of the ancient Jews, was to train up their children in the fear of God. In order that the children might be exposed as little as possible to the corrupting influence of heathen associations, their education was conducted within the healthful precincts of home. As a result, they grew up without a taste for debasing pleasures; they acquired simple domestic tastes; and, when the

time came, they took their place as consistent and earnest workers in the Church.

Such was the character of education among the primitive Christians. It is defective, indeed, subordinating and even sacrificing the intellectual to the moral and religious elements of our nature ; but the type of character it produced was truly admirable. The beauty of this character made its impression upon an age notorious for its vice. It extorted unwilling praises from the enemies of Christianity. A celebrated heathen orator exclaimed, "What wives these Christians have!" "A noble testimony," says a writer of note, "to the refining power of woman, and the most beautiful tribute to the gentle, persuasive influence of her piety which all antiquity, heathen or Christian, furnishes."

(A.) CATECHETICAL SCHOOLS.

The catechetical schools, which sprang up naturally in this primitive period, were designed to prepare candidates for Christian baptism. In the apostolic period, new converts to Christianity were received into the church by baptism after a very brief course of instruction and upon a very simple profession of faith. The Ethiopian eunuch, for example, received at most only a few hours' instruction as he rode along in his chariot, and was baptized upon the confession, "I believe that Jesus Christ is the Son of God." But as Christianity spread, and converts from among the Jews and heathen became more numerous, it was found advisable, for the sake of greater unity, purity, and intelligence in the Church, to give candidates for baptism more extended

instruction. This instruction, which extended from a few months to three years, was given by a special Church officer under the name of catechist, and embraced the fundamental truths and doctrines of Christianity. The candidates, called catechumens, or learners, studied the ten commandments, the Lord's prayer, and other portions of Scripture, as well as a short confession of faith containing the chief articles of Christian belief. The instruction was at first imparted privately at some convenient place, but afterward in the Church or school-buildings.

The most celebrated of the catechetical schools was that of Alexandria, founded in the second century. It was in this city that Christianity came into closest contact with heathen culture. Many of the candidates applying for admission into the Church were representatives of heathen learning. In preparing them for baptism, it was necessary that the instruction assume a more complete and scientific form. In addition to this, the Alexandrian school devoted itself to the education of Christian teachers. It became, in fact, a theological seminary of high order, in which, along with specifically Christian instruction, philology, rhetoric, mathematics, and philosophy were studied. The attitude of this school toward heathen learning is thus expressed by Clement, one of its earliest and most distinguished teachers: "The Mosaic law and heathen philosophy do not stand in direct opposition to each other, but are related like fragments of a single truth, like the pieces, as it were, of a shattered whole. . . . Both prepared the way, but in a different manner, for Christianity." The school had no public buildings; and the teachers,

several of whom were very distinguished, taught in their private houses. They received no fixed salary, but were supported by gifts from their pupils.

"At Alexandria," says Neander, "where it often happened that men of education, even the learned, and those habituated to philosophical reflection, applied to receive instruction in Christianity, it was necessary that the catechists should be men of liberal education, qualified to meet the doubts and objections of pagans, and to follow them on their own position. Able and learned laymen were therefore selected here; and this class of catechists led afterward to the formation of an important theological school among the Christians." Alexandria was the birthplace of scientific Christian theology.

5. EDUCATION DURING THE MIDDLE AGES.

It is necessary to notice a peculiar tendency in the Church which exerted for nearly a thousand years an important influence upon education. This was the ascetic tendency, which disdains the present world in the interests of the world to come. This tendency has been forcibly characterized by George Eliot as "other-worldliness." It fails to grasp the great truth that human life is an organic unity; that eternal life is but a continuation of temporal life; and that on earth, as well as in heaven, we are in the presence and service of God. Asceticism, which manifested itself in various forms of self-abnegation or physical torture, was based upon the idea that the body is the seat of sin. Hence it was concluded that by imposing restraints and suffering upon

the body, by which its natural force was weakened, the soul was enabled to attain to a higher degree of sanctity. The two principal classes of ascetics were the hermits, who withdrew from society to live in solitude ; and the monks, who lived together in monasteries under the ✓
vow of poverty, chastity, and obedience. The latter was far the more numerous class, and its existence has been perpetuated to the present.

Traces of the ascetic spirit are to be found in the primitive Church ; but it was not till late in the fourth century that it reached a complete development. It then remained dominant throughout the middle ages. Perhaps it was a phase of human development necessary in the zigzag march of progress, and indispensable to the ultimate attainment of truth. At all events, it was a natural one. The heathen world had long been attaching too much relative importance to the earthly life. By a natural reaction, the Church, when it came to assert itself in opposition to prevailing beliefs and customs, unduly contemned the present world in magnifying the world to come. This one-sided, other-worldly spirit exerted a wide-reaching influence, laying its hand upon every important human interest. The natural world was made to possess no value. Religious doctrines, forms, and interests became the all-absorbing subject of human thought and activity. The priesthood were elevated into a false importance, which was used by them to increase their power. Science was sunk in theology. History gave place to marvelous legends of saints ; and the principle of authority controlled all scientific thought. Education was stamped with a theological bias that fettered it for ages. In fact, this ascetic

spirit may be regarded as the controlling principle in Christian education prior to the Reformation.

"In the first stage of its development," profoundly observes Karl Schmidt, in speaking of the Church, "it was religion especially that dominated all intellectual interests. The religious impulse in Christianity was so powerful and weighty that the human spirit found in it and its exemplification complete satisfaction. There was a great withdrawal of man within himself, into that part of his nature that unites him to God, and that belongs, not to the perishable, but to the imperishable; not to the visible, but to the invisible world. The supernatural laid hold of men's minds with mighty energy. Man, as the son of heaven, became a stranger upon this earth, and esteemed the splendor of this world as of little value. The world in all its beauty had been tested by antiquity, and had not afforded the lasting peace promised of it. Heaven now took its place, and the citizen of heaven displaced in a measure the citizen of earth. This one-sided apprehension of man as a heavenly being, this complete sway of the transcendental, forms the leading characteristic of the world before the Reformation, in which period Christianity appeared as an abnegation of the world. Only the world of religion is truth. The natural world is destitute of worth, and escape from it is the end of life. Hence the world-disowning asceticism, fasting, celibacy."

This ascetic, transcendental movement very soon found advocates among the most influential of the Church fathers. As early as the beginning of the third century, Tertullian, presbyter of Carthage, attempted to exclude the Church from all intercourse with the world.

He rejected the study of heathen philosophy and literature as destructive of Christian simplicity, and promotive of pride, overwiseness, and immorality. "If science and literature delight you," he says, "we have an abundance of verses, sentences, and songs; no fables, but truth, no artistic melodies, but simplicity. . . . If you seek science, we have it, but not from Athens. What has Athens to do with Jerusalem, the Academy with the Church? Our doctrine comes from the porch of Solomon, according to whose teaching the Lord is to be sought in simplicity of heart. We need not investigate further after we have found Christ; we need not seek further after we have received the gospel."

Says Chrysostom, a distinguished Church father of the fourth century: "Parents ought to give their children a name having a Christian signification, in order that it may subsequently be a source of good influence. . . . Mothers ought to care for the bodies of their children, but it is necessary also that they inspire their offspring with love for the good and with fear toward God. And fathers will not limit themselves to giving their children an earthly vocation, but will interest themselves also in their heavenly calling. The most beautiful heritage that can be given children is to teach them to govern their passions. Never ought they to hear licentious conversation at home. Let us take care to develop modesty in them, for nothing torments youth so much as what is contrary thereto. Let us have for our children the same fear that we have for our houses, when servants go with a light into places where there is inflammable material, as hay or straw. They should not be permitted to go where the fire of impurity may be

kindled in their hearts and do them an irreparable injury. A knowledge of the Scriptures is an antidote against the unreasonable inclinations of youth and against the reading of pagan authors, in which heroes, the slaves of every passion, are lauded. The lessons of the Bible are springs that water the soul. As our children are everywhere surrounded with bad examples, the monastic schools are the best for their education. Bad habits once contracted, they can not be got rid of. This is the reason God conducted Israel into the wilderness, as into a monastery, that the vices of the Egyptians might be unlearned. And yet the Israelites were continually falling into their old habits! Now our children are surrounded by vice in our cities and are unable there to resist bad examples. In the monasteries, they do not see bad examples; they lead there a holy life in peace and tranquillity. Let us take care of the souls of our children, that they may be formed for virtue, and not be degraded by vice."

The same one-sided religious tendency comes out strongly in the long and interesting letter of St. Jerome to Laeta, a friend of his, upon the education of her daughter. He lived in the latter half of the fourth century. A single extract will suffice to indicate the spirit of the whole letter. "Let the companion she chooses," he says, "be not well-dressed or beautiful, or with a voice of liquid harmony; but grave, and pale, and meanly clad, and of solemn countenance. Set over her an aged virgin, of approved faith, and modesty, and conduct, to teach and habituate her, by her own example, to rise up by night for prayer and psalms, to sing her morning hymns, and to take her place in the ranks,

like a Christian warrior, at the third, and sixth, and ninth hours; and, again, to light her lamp and offer up her evening sacrifice. Let the day pass, and the night find her at this employment. Prayer and reading, reading and prayer, must be the order of her life; nor will time travel slowly when it is filled by such engagements."

The ascetic tendency found an ardent representative in St. Augustine, who has been called the Paul of the fifth century. With great vehemence he rejects all heathen science in Christian education. "Those endless and godless fables," he says, "with which the productions of conceited poets swarm by no means accord with our freedom; neither do the bombastic and polished falsehoods of the orator, nor finally the wordy subtilties of the philosopher. God forbid that trifles and foolishness, windy buffoonery, and inflated falsehood should ever be properly called science!" Again he says: "A young man exclaims, in reading a scene of Terence, 'What! is it not permitted us to do what the gods dare to do?' This reasoning is carried on by many young people. We learned beautiful words in our authors, but we learned more easily to commit bad actions. Intoxicated pagan masters made us drink in the cup of error, and beat us when we refused. Was there then no other means to teach us our language and to cultivate our mind?"

It would be a mistake, however, to suppose that all the fathers of the Church shared this narrow spirit. There were not wanting those who held broader and juster views, and who advocated an education that comprehended the valuable elements of heathen culture.

For example, Basil the Great, of the fourth century, says: "In the combat which we have to deliver for the Church, we ought to be armed with every resource, and to this end the reading of poets, historians, and orators is very useful. . . . We may compare the lessons of holy Scripture to the fruits of a tree, and the productions of pagan wisdom to the foliage which shelters the fruit and gives grace to the tree. . . . Moses cultivated his intelligence by studying the science of the Egyptians, and Daniel adorned his mind with that of the Chaldeans. . . . But there is a choice to be made among pagan authors. It is necessary to close the ear to bad reading, as Ulysses did to the seductive songs of the sirens. The habit of reading bad actions leads to doing bad acts. It is necessary to reject the shameful stories of the gods, as we are to shun the voluptuous music of the pagans."

(A.) MONASTIC SCHOOLS.

Under the impulse of asceticism, monasteries were rapidly multiplied. By the seventh century they were scattered throughout all the countries that had once composed the Roman Empire. The Benedictine order, founded in the sixth century, was the largest and most influential brotherhood. As long as the monasteries retained their purity they were in many respects sources of blessing to the world. They became asylums for the oppressed; fortresses against violence; missionary stations for the conversion of heathen communities; repositories of learning; homes for the arts and sciences. They preserved and transmitted to later ages much of the learning of antiquity.

As the heathen schools had now disappeared, the monasteries engaged in educational work. The Church regarded education as one of its exclusive functions, and under its direction nearly all instruction had a theological or ecclesiastical aim. Purely secular studies were pursued only in the interests of the Church. The course of instruction in the convent or monastic schools embraced the so-called seven liberal arts, which were divided into two classes: the *trivium* included Latin grammar, dialectic or logic, and rhetoric; and the *quadrivium*, arithmetic, geometry, astronomy, and music. Reading and writing were included in grammar, and arithmetic and music were sometimes substituted for the other studies of the *trivium*, which was the first and most popular course. Seven years were devoted to the completion of the course in liberal arts. Latin, the language of the Church, was made the basis of education, to the universal neglect of the mother-tongue. The works of the Church fathers were chiefly read, though expurgated copies of the Latin classics were used. Dialectic or logic was based somewhat remotely on the writings of Aristotle. At a later period, logic was rigidly applied to the development of theology, and gave rise to a class of scholars called the school-men. These busied themselves with theological and philosophical subtleties, many of which now appear ridiculous. The works of Quintilian and Cicero, or later works based upon them, were used in rhetoric. Arithmetic was imperfectly taught, importance being attached to the supposed secret properties of numbers. Geometry was taught in an abridged form, while astronomy did not differ materially from astrology. The study of

music consisted chiefly in learning to chant the hymns of the Church.

The relation in which these liberal studies stood to theology is thus indicated by Rhabanus Maurus, an educational writer of the early part of the ninth century: "Grammar teaches us to understand the old poets and historians, and also to speak and write correctly. Without it, one can not understand the figures and unusual modes of expression in the holy Scriptures, and consequently can not grasp the right sense of the divine Word. Even prosody should not be neglected, because so many kinds of versification occur in the Psalms; hence, industrious reading of the old heathen poets and repeated exercise in the art of poetic composition are not to be neglected. But the old poets should be previously and carefully expurgated, that nothing may remain in them that refers to love and love-affairs and the heathen gods. Rhetoric, which teaches the different kinds and principal parts of discourse, together with the rules belonging to them, is important only for such youths as have not more serious studies to pursue, and should be learned only from the holy fathers. Dialectic, on the contrary, is the queen of arts and sciences. In it reason dwells, and is manifested and developed. It is dialectic alone that can give knowledge and wisdom; it alone shows what and whence we are, and teaches us our destiny; through it we learn to know good and evil. And how necessary is it to a clergyman, in order that he may be able to meet and vanquish heretics! Arithmetic is important on account of the secrets contained in its numbers; the Scriptures also encourage its study, since they speak of numbers and

measures. Geometry is necessary, because in Scripture circles of all kinds occur in the building of the ark and Solomon's temple. Music and astronomy are required in connection with divine service, which can not be celebrated with dignity and decency without music, nor on fixed and definite days without astronomy."

(B.) CATHEDRAL AND PAROCHIAL SCHOOLS.

Besides the convent or monastic schools, there were two other classes of schools that owed their origin to the Church during the middle ages. They were the cathedral and the parochial schools. The cathedral schools, though previously existing to some extent, received their perfected organization through Bishop Chrodegang in the eighth century. The priests connected with each cathedral church were organized into a monastic brotherhood, one of whose foremost duties was to establish and conduct schools. These were designed chiefly for the instruction of candidates for the priesthood, but were, at the same time, accessible to others. The instruction in these schools was very much the same as in the convent-schools, embracing the seven liberal arts, but laying a little more stress on religious subjects.

The parochial schools were established in the separate parishes under the supervision of the priest. They were designed to acquaint the youth with the elements of Christian doctrine, to prepare them for intelligent participation in public worship, and especially to introduce them into church-membership. Their function was similar to that of the catechetical schools of the primitive Church. Reading and writing did not usually

form any part of the course of study. The discipline in these, as in all the other schools of the middle ages, was rough and severe, the rod being unsparingly used.

Neander thus speaks of the interest of the Church in the instruction of the people: "The third Council of Valence in 855 decreed in its sixteenth canon that every bishop should either in person, or by the agency of well-instructed ministers of the Church, so administer the word of preaching, both in the city and in the country churches, that there should be no want of wholesome exhortation for the people; for when God's Word is not furnished to the faithful, the soul is deprived of the element of its life. Herard, Bishop of Tours, in his pastoral instructions written in the year 858, directed that the priests should expound before all the faithful the doctrines of the incarnation of the Son of God; of his passion, his resurrection, and ascension; of the effusion of the Holy Spirit, and the forgiveness of sins to be obtained through the same Spirit, and the baptism into the bosom of the Church; that they should warn people against sins, particularly sins of the grosser sort, and instruct them in the nature of the virtues. . . . The necessity of establishing schools for the promotion of religious instruction and of the prerequisite culture was also acknowledged. In the year 859 the Council of Langres and the Council of Savonnières decreed that, wherever God raised up able men for teachers, all suitable efforts should be made to found public schools, so that the fruits of both kinds of knowledge, spiritual and secular, might grow in the Church; for it is a lamentable fact, and a most disastrous evil, that the true

understanding of Scripture has already become so far lost that the lingering remains of it are now scarcely to be found. . . . But the defects we have already noticed in the constitution of the Church were the true reason why a sufficient number of the clergy were never to be found capable, or inclined to study and apply these instructions. The majority of the clergy who came in immediate contact with the people possessed no other qualification for their office than a certain skill and expertness in performing the ceremonies of the Church. The liturgical element would thus of necessity tend continually to acquire an undue predominance, suiting as it did the prevalent idea of the priesthood; while the didactic element—an element so important for promoting the religious knowledge which was so neglected among the people—would, on the other hand, retreat more and more into the background.”

(C.) CHARLEMAGNE.

The labors of Charlemagne for the moral and intellectual elevation of his people were intelligent and fruitful. He sought to multiply educational facilities on a large scale; and he even went so far as to contemplate the organization of a popular school system. He endeavored to enlist the interest of the clergy and monks in education, as they were at this time the chief representatives of learning. He opposed their worldliness and immorality, and exacted a faithful discharge of their duties. The monasteries and bishops were urged to improve the schools already existing, and to establish new ones wherever needed. The sphere of the parochial schools was enlarged; and the village priests were re-

quired to teach not only religion, but also reading, arithmetic, and singing.

Charlemagne thus speaks in a circular letter addressed to the bishops and convents: "We esteem it useful not only that care should be exercised to live orderly and religiously in the bishoprics and monasteries intrusted to our care by the grace of God, but also that all those who by God's help are able to teach should give instruction in the sciences. For although it is better to do than to know, yet it is necessary to know in order to be able to do. . . . Hence, we admonish you not only not to neglect the study of the sciences, but also to strive after the ability to fathom easily and certainly the secrets of holy Scripture. But, since there are in the same allegories, figures, and the like, it is evident that he will best understand them in their true spiritual sense who is well instructed in the sciences. Hence, let men be chosen for such work who possess willingness and ability to learn, and art to teach."

Charlemagne exhibited a great thirst for knowledge, and was himself a model of diligence in study. He invited to his court from all parts of Europe the most distinguished scholars, of whom Alcuin, of England, the most learned man of his time, is best known. With these he maintained interesting and intimate relations, presiding at their assemblies and sharing in their discussions. He established a model school at court, and sometimes visited it in person to note the progress of the pupils. It is related of him that he once placed the diligent pupils on his right, and the idle ones on his left; and, when he found that the latter were chiefly sons of noble parents, he addressed them thus: "Be-

cause you are rich and the sons of noblemen, you think that your riches and birth are enough, and that you have no need of those studies which would do you so much honor. You think only of dress, play, and pleasure; but I tell you that I attach no importance to this nobility and wealth which bring you consideration; and, if you do not speedily make up by assiduous study for the time you have lost in frivolity, never will you obtain anything from Charles."

The educational activity stimulated by Charlemagne largely died away during the agitated reigns of his weak and grasping successors.

(D.) SECULAR EDUCATION.

In the latter half of the middle ages, secular education came into prominence. It assumed two directions: the one was the offspring of chivalry, and may be termed knightly education; the other arose from the business necessities of the cities, and may be termed burgher or town education. These secular tendencies were in part a reaction against the one-sided religious character of the ecclesiastical schools, and in part the natural product of peculiar social conditions. What these conditions were will now be examined.

Society during the middle ages may be divided into three classes: ecclesiastics, embracing the clergy and monks; warriors, including the nobles and knights; and producers, comprehending mechanics, tradesmen, and peasants. During a great part of the middle ages, the ecclesiastics exerted a tyrannical domination over the other two classes, holding in their hands, as they did, the keys of knowledge and salvation. The pope assumed

absolute temporal as well as absolute spiritual dominion. Opposition to the Church was punished with excommunication; sometimes with the interdict, which forbade the exercise of every religious function within a given territory; and, in extreme cases, with the crusade, which exposed whole provinces to utter destruction.

With the crusades, during which great multitudes rushed with fanatical zeal to the Holy Land to rescue the sepulchre of our Lord from Mohammedan hands, there began a noteworthy change in the social relations of Europe. The crusades, though at an almost incredible cost of life, contributed largely to the progress of civilization. They enlarged the contracted sphere of human knowledge. Foreign lands, and new customs, sciences, and arts were introduced into the circle of popular thought. The knightly class was brought into a new importance, was largely increased in numbers, and admirably ennobled in its aims. The crusades led to the emancipation of many serfs, and elevated them to the rank of free peasants. They quickened commerce, trade, and manufacture; increased and strengthened the burgher class; and extended the power and influence of the cities. The knightly and burgher classes attained to a feeling of self-consciousness and independence. They emancipated themselves, to some extent at least, from ecclesiastical tutelage; and this naturally led to a change in education.

(E.) KNIGHTLY EDUCATION.

Knightly education stood in the sharpest contrast with that of the Church. It attached importance to

what the Church schools neglected and condemned. Physical culture received great attention ; polished manners were carefully cultivated ; and a love of glory was constantly instilled. Women were held in worshipful regard as the embodiment of honor and virtue. The native tongue was cultivated. Nature was not made to stand in unnatural opposition to spiritual interests, but, on the contrary, inspired the noblest sentiments and purest joys.

Knightly education was usually divided into three equal periods. For the first seven years, the young candidate for knighthood remained in the paternal castle under the care of his mother. After that age, he was usually sent to live with some friendly knight, where, in constant attendance upon the chatelaine or her lord, he learned music, chess, and knightly manners. At fourteen he was made squire or attendant, and his physical and military education became more exacting. Everywhere, in the pleasures of the chase, the excitement of tournaments, and the dangers of battle, he was the faithful companion of his master. Having proved himself worthy during a long probationary period, the young squire, at the age of twenty-one, was formally elevated, with solemn and imposing ceremonies, to the knightly order. After a season of fasting and prayer, and the celebration of the Lord's Supper, he took the vow to speak the truth, defend the right, honor womankind, and use his sword against the infidels of the East ; and then he received, at the hand of a knight or noble lady, his spurs, gauntlets, and suit of armor.

Such was the education of the knight. Almost the sole intellectual element entering into it was music and

poetry. At one time, this was very prominent; and one of the richest literary treasures coming down to us from the middle ages is the large collection of knightly songs comprehended under the term *Minne*, or love-poetry. These songs were employed, during the long nights of winter or the prevalence of stormy weather and deep snows, to relieve the monotony of life within the castle walls. The newspaper, works of fiction, theatrical or literary entertainments, and highly developed music—the great resources of modern life against *ennui*—were then wanting. Apart from tales of adventure and a few rude games, minstrelsy was the only resource left the company of the castle. Accordingly, they were accustomed to gather at night in the principal hall around the great log-fire; and as the men sat by their ale-cups or worked at replenishing their quivers, and the ladies apart stitched their embroidery, some knight, perhaps one just welcomed to friendly shelter, took up the lute, and, with rude accompaniment, poured forth song after song, or related by the hour his rhythmical tales.

As a specimen of the *Minne*-songs—the most beautiful flower of knightly education—the following lines will suffice:

The woodlands with my songs resound,
As still I seek to gain
The favor of that lady fair
Who causeth all my pain.

My fate is like the nightingale's,
That singeth all night long,
While still the woodlands mournfully
But echo back her song.

What care the wild woods, as they wave,
 For all the songster's pains?
 Who gives her the reward of thanks
 For all her tuneful strains?

In dull and mute ingratitude
 Her sweetest songs they hear;
 Their tenants roam the desert wild,
 And want no music there.

(F.) BURGHER SCHOOLS.

The growth of the cities and the increasing power of the trading and artisan classes have already been noticed. With the growing importance of these two classes, there came the conscious need of an education that would have immediate reference to the practical wants of life. Reading, writing, and arithmetic were indispensable. Out of this need arose a class of schools which have borne different names, as town, burgher, or writing schools. In addition to the elementary studies just mentioned, geography, history, and natural science were pursued, in a small way, in connection with the mother-tongue. Latin also was early introduced. Notwithstanding the fact that the burgher schools were secular institutions, both in origin and aim, the clergy as the only authorized teachers claimed the right to control them. This claim, which was often resisted by the civil magistrates, frequently occasioned strife, in which sometimes the one party and sometimes the other was successful. Where the civil authorities maintained ascendancy, they appointed teachers whose duties were prescribed by a contract. The principal teachers, who were engaged for one year at a time, em-

ployed and paid their assistants. The salaries were so small that they barely sufficed to procure the necessities of life. The teachers generally led a wandering life, moving from city to city in search of employment. The itinerant teacher, known as *bacchant* or *vagrant*, was sometimes accompanied by a crowd of pupils called *A B C shooters*, whose habits of purloining fowls and other articles of food did not contribute to their popularity, nor to the elevation of the profession of teaching. As there were no school-houses at this period, instruction was given in churches, municipal buildings, or other houses rented for the purpose. The first school-house was built in Berne, in 1481.

(G.) FEMALE EDUCATION.

During the middle ages, female education, outside of the knightly order, was generally neglected. Here and there, in connection with nunneries, a few women attained distinction by their learning, but these cases were exceptional. Among the knightly class, where women were held in high honor, great attention was paid to female culture. Not only were the young women instructed in the feminine arts of sewing, knitting, embroidery, and housekeeping, but they also received an intellectual training which, in addition to reading and writing, often included an extended acquaintance with French and Latin.

The peasant class, during all this period, were almost entirely neglected. The only provision made for their instruction was in the parochial schools, which were devoted almost exclusively, as we have seen, to religious instruction. The peasants were indeed wanting in the

educational impulse. They failed to see how education would help them in their drudging toil, and hence were not responsive to any effort for their intellectual improvement.

(H.) BRETHREN OF THE COMMON LIFE.

In the fourteenth century a brotherhood, founded by Gerhard Groot, and known as Hieronymians, or Brethren of the Common Life, devoted themselves to the work of education, with special reference to the poorer classes. Without assuming monastic vows, the members of this brotherhood led a life of purity, and labored with unselfish devotion for the good of others. Establishing a community of goods, they supported themselves by the work of their own hands. By its pure and self-sacrificing life, the brotherhood rapidly grew in popular favor, was extensively patronized, received papal recognition and protection, and soon spread over the northern part of Germany. It maintained its existence till the sixteenth century.

Special emphasis was laid upon religious education, as will be seen from the following words of the founder: "Spend no time either on geometry, arithmetic, rhetoric, logic, grammar, poetry, or astrology. All these branches Seneca rejects; how much more, then, should a spiritually-minded Christian pass them by, since they subserve in no respect the life of faith! Of the sciences of the pagans, their ethics may not be so scrupulously avoided, since this was the special field of the wisest of them, as Socrates and Plato. That which does not improve a man, or, at least, does not reclaim him from evil, is positively hurtful. Neither ought we to read

pagan books, nor indeed the Holy Scriptures, in order merely to penetrate into the mysteries of Nature by that means." Practically, however, the order departed considerably from this religious narrowness, and devoted itself not simply to the elementary instruction of the people, but also to the higher education. The two most celebrated members of this order were Thomas à Kempis, and Nicholas Cusanus, who interested himself with success in educational work, as well as in reformatory measures for abuses in the Church.

"In the schools of the brotherhood," says Johannes Janssen, a painstaking Catholic writer, "Christian education was placed high above the mere acquisition of knowledge, and the practical religious culture of the youth, the nurture and confirmation of active piety, was considered the chief object. All the instruction was penetrated with a Christian spirit, and the pupil learned to regard religion as the most important human interest, and the foundation of all true culture. At the same time, a considerable amount of knowledge and a good method of study were imparted, and the pupil acquired an earnest love for literary and scientific activity. From all quarters studious youth poured into these schools."

(I.) THE SCIENTIFIC SPIRIT.

But a single point remains to be considered to complete our review of education in the middle ages. This is the growth of the scientific spirit. To the awakening of this spirit, two principal causes contributed. The first of these was the increase of human knowledge growing out of the crusades, the growth of the cities,

and the social elevation of the laity; the other was the influence of the Arabian or Mohammedan schools.

(J.) MOHAMMEDAN LEARNING.

After the establishment of Mohammedanism in the seventh century, it was carried by the force of arms over large portions of Asia, Africa, and Europe. Empires were established, in which learning kept pace with political power. The caliphs of Cordova and Bagdad became rivals in their patronage of learning, no less than in political power and ostentatious luxury. The writings of the Greeks, especially those of Aristotle and Euclid, were translated into Arabic. Flourishing schools were established in all the principal cities, notably at Bagdad and Damascus in the East, and at Cordova, Salamanca, and Toledo in the West. Here grammar, mathematics, astronomy, philosophy, chemistry, and medicine were pursued with great ardor and success. The Arabians originated chemistry, discovering alcohol, and nitric and sulphuric acids. They gave algebra and trigonometry their modern forms; applied the pendulum to the reckoning of time; ascertained the size of the earth by measuring a degree, and made catalogues of the stars. For a time, they were the intellectual leaders of Europe. Their schools in Spain were largely attended by Christian youth from other European countries, who carried back with them to their homes the Arabian science, and through it stimulated intellectual activity in Christian nations. In the eleventh century, having imparted its intellectual treasures to the Christian world, Arabian learning began to decline, and has since fallen into utter insignificance.

(K.) RISE OF THE UNIVERSITIES.

The richest fruit of this newly awakened scientific spirit in Europe was the founding of the universities. They arose independently of both Church and state. In the beginning they consisted of free associations of learned men and aspiring youths, who were held together alone by their mutual interest in science. In this way the University of Bologna had its origin in the twelfth century for the study of law, and the University of Salerno shortly afterward for the study of medicine. Toward the close of the twelfth century the University of Bologna numbered no less than twelve thousand students, most of whom came from distant countries. During this century the cathedral school of Paris was enlarged into a university, in which the study of theology was predominant. This became the most distinguished seat of learning in Europe. At one time it was attended by more than twenty thousand students, who for the purpose of better government were divided into bodies according to nationality. They had special halls called colleges, in which they lodged and boarded under official supervision. The professors were divided into the four faculties—philosophy, theology, medicine, and law—which have since been retained in universities, though the studies in each department have been greatly enlarged.

The moral tone of the universities was low; there were brawls, outbreaks, and abominable immoralities. "The students," say the Vienna statutes, "shall not spend more time in drinking, fighting, and guitar-playing, than at physics, logic, and the regular courses of lectures; and they shall not get up public dances in the

streets. Quarrelers, wanton persons, drunkards, those that go about serenading at night, or who spend their leisure in following after lewd women; thieves, those that insult citizens, players at dice—having been properly warned and not reforming, besides the ordinary punishment provided by law for those misdemeanors, shall be deprived of their academical privileges and expelled.” These prohibitions give us a clear insight into the university life of the time, for it was not worse at Vienna than at Paris and elsewhere.

The influence and power of the universities were speedily recognized; and, though originally free associations, they were soon brought into relation with the Church and the state, by which they were officially authorized and endowed with privileges. “Although the universities were free associations,” says Karl Schmidt, “yet as intellectual forces they were soon drawn into the various spheres of life, and Church as well as state, princes as well as cities, rivaled each other in winning their influence by bestowing favors upon them. First, the Church sought to attach them to itself, in order to join to the power of faith the power of knowledge: the first privileges that the universities received proceeded from the popes. . . . On the other hand, the emperors desired and sought the development of a free secular culture, in order to procure for their might and power an intellectual foundation; and they hastened, therefore, to circumvent the ecclesiastical influence, and to give the new universities an independent position. Thus, in November, 1158, Frederick I. gave the University of Bologna a privilege, whereby the students from abroad were granted his protection, and a court of their own

was allowed them. 'For if already all those that do good,' he says, 'merit in every way our praise and protection, we hold it proper with especial grace to defend those against all injury, whose science enlightens the world, and teaches subjects to obey God, and us as his servants.'"

After the establishment, in the twelfth century, of the three universities already spoken of, similar institutions, modeled particularly after the University of Paris, sprang up in the various countries of Europe. The German universities of the fourteenth and fifteenth centuries were founded in the following order: Prague, 1348; Vienna, 1388; Erfurt, 1392; Leipsic, 1409; Rostock, 1419; Greifswald, 1456; Freiburg, 1457; Ingolstadt, 1472; Tübingen, 1477; and Mayence, 1477. Thus, it will be seen that they were established in quick succession—an unmistakable proof of the growing scientific interest of the age.

(L.) SUMMARY.

Here our review of education before the Reformation must end. Education did not have a complete and beautiful development. It was unworthily enslaved to other interests, and both in theory and practice it showed its servile condition. Yet the long, dark period of the middle ages was not without blessings for mankind. It was the winter that gathers strength for the blossoming of spring and the fruit-bearing of summer. The foundations of future progress were laid. The Germanic nations were placed in possession of Christianity and civilization. One-sided tendencies worked themselves out, and have since remained for the instruction of our race.

The work of this period was largely negative. If the middle ages have not taught us what to do in education, they have at least showed us a good deal to avoid. And, as the history of our race proves, this negative work has always to be done before humanity makes any signal progress. Heathenism had to exhaust its intellectual strength before the world was ready to accept Christianity.

IV.

EDUCATION FROM THE REFORMATION TO THE PRESENT TIME.

THE Reformation of the sixteenth century is the greatest event in modern history. Its vast influence upon human development is surpassed only by the advent of Christ. It marks the close of a long, dark night, and dates a new era in human progress.

It was not, however, an isolated fact. There were many concurring circumstances which prepared the way for it, and gave it power in the world. The revival of classical learning, which had its central point in the downfall of Constantinople in 1453, exerted a favorable influence. It opened the literary treasures of Greece and Rome, provided a new culture for the mind, awakened dissatisfaction with the scholastic teaching of the Church, and tended to emancipate thought from subjection to ecclesiastical authority. The invention of gunpowder brought about an important and wholesome change in the organization of society. It destroyed the influence and power of the knightly order, elevated the producing class, and thus became a mighty leveler. Before this invention a single knight, clad in a full suit of armor, and mounted upon a powerful charger, was

a match for a whole company of foot-soldiers. The strength of armies was measured by the number of knights. But after the invention of gunpowder, in the fourteenth century, which made the humblest footman with a musket more than a match for the proudest knight, chivalry necessarily declined. The discovery of America, and of a sea-passage to the East Indies, exerted an elevating influence by enlarging the circle of knowledge. Correct views of the earth supplanted the Ptolemaic system. The commercial activities of the world began to move in new directions, and to assume enlarged proportions. But the most important of all was the invention of printing, about the middle of the fifteenth century. At once supplanting the tedious and costly method of copying books by hand, it multiplied the sources of knowledge, and brought them within reach of a larger circle of readers. Each of these circumstances was a lever to lift the world up to a higher plane. The Reformation broke the fetters yet holding it, and started it forward in a new course of intellectual, moral, and religious development.

1. THE REVIVAL OF LEARNING AND THE HUMANISTS.

The revival of learning was so intimately related to the Reformation, and to the educational advancement dating from that time, that it calls for consideration in some detail. It had its origin in Italy. The three great Italian writers of the fourteenth century—Dante, Boccaccio, and Petrarch, all of whom had made a more or less profound study of the ancient classics—may be regarded as its pioneers. The widely extended scientific

spirit, which has already been noticed at some length, prepared the way for its rapid spread. The first Greek to introduce the literary treasures of his country into Italy was Manuel Chrysoloras, who received from the city of Florence, in 1396, an appointment as teacher. This was the humble beginning to be followed by great results. When Constantinople was captured by the Turks, in 1453, many Greek scholars took refuge in Italy. The times were propitious for them. Noble and wealthy patronage was not lacking, and under its fostering care they became for a time the teachers of Europe. They succeeded in kindling a remarkable enthusiasm for antiquity. Manuscripts were collected, translations were made, academies were established, and libraries were founded. Several of the popes became generous patrons of ancient learning; Nicholas V. founded the celebrated Vatican Library, and collected for it a great number of Greek and Latin manuscripts; and under Leo X. Rome became a center of ancient learning. Eager scholars from England, France, and Germany, sat at the feet of Italian masters, in order afterward to bear beyond the Alps the precious seed of the new culture.

The revival of letters produced different results in different countries. Everywhere it contributed to the emancipation of the human mind, but in Italy it tended strongly to paganize its adherents. Ardor for antiquity became at last intoxication. Infidelity prevailed in the highest ranks of the Church; Christianity was despised as a superstition; immorality abounded in the most shameful forms. The heathenism of Athens was revived in Christian Rome. The remark that Leo X. is said to have made to Cardinal Bembo well accords with

the prevailing spirit of the time: "All the world knows how profitable this fable of Christ has been to us." The wide-spread infidelity made it necessary for the tenth Lateran Council to establish the doctrine of the immortality of the soul by a special decree. When Luther was dispatched to Rome as envoy of the Augustine brotherhood, he was one day at table with several distinguished prelates. Their conversation, as he tells us, was impious. Among other things, they boasted that at mass, instead of the sacramental words which were to transform the bread and wine into the body and blood of our Saviour, they mockingly pronounced over the elements, "Bread thou art, and bread thou shalt remain; wine thou art, and wine thou shalt remain." Blasphemy was never more shameless.

The simple language of the Scriptures, which was offensive to the devotees of the ancient classics, was subject to outrageous parody, and its sublime truths were translated into the terms of heathen mythology. The Holy Ghost was written the "breath of the heavenly zephyr"; the expression to forgive sins was rendered "to bend the manes and the sovereign gods"; and Christ, the Son of God, was changed into "Minerva, sprung from the head of Jupiter." The representatives of the Church, even those of the highest station, were guilty of monstrous crimes. The Vatican became the scene of treachery and murder, and the dissolute entertainments given in the pontifical palace surpassed the impure groves of antiquity in horrible licentiousness.

Such was the state of belief and morals prevailing in Rome at a time when ancient learning and the fine arts

were cultivated in a high degree. Well may Ranmer exclaim: "How strangely united in one and the same land, at one and the same time, the most splendid and the most horrible! What an angelic child must Raphael have been, yet his childhood falls at the iniquitous time of Alexander VI. Yea, how often in one and the same hero of art were united the most beautiful and the most hateful, the noblest and the most debased, pious devotion and detestable sensuality! Into what sins he fell and sank, when his love for Nature and antiquity degenerated into unrestrained and godless lust, and his art as his life became truly pagan!"

But we gladly turn from Italy in order to contemplate the results that followed the revival of learning in Germany. Fortunately for the world, the Germanic mind did not lose its earnestness and depth in studying the literary treasures of antiquity. The new learning was cultivated with as much zeal in Germany as beyond the Alps, but its results were utilized in the interests of a purer Christianity. The Greek and Hebrew Scriptures were studied as well as the classics of Greece and Rome. Critical editions of the Old and New Testaments were published by able scholars, and thus the means were supplied for discovering and correcting the abuses introduced into the Church by the papacy. The traditions of the middle ages were broken, dissatisfaction with the existing state of the Church was awakened, and the reformers were supplied with an invincible weapon. In Italy the new learning became a minister of infidelity; in Germany, of religion.

The revival of learning in Germany led to a bitter conflict with the monks. The monasteries at this period

had sunk to a wretched condition. Instead of the learning and purity that characterized them in an earlier age, they had become nests of ignorance and depravity. Sensual indulgences had dulled the intellect and broken the energies of the body. "The monks had a pleasant time of it," says Luther; "every brother had two cans of beer and a quart of wine for supper, with gingerbread, to make him take to his liquor kindly. Thus the poor things came to look like fiery angels."

The monks, as the representatives of the established order of things, scented danger in the new learning. They foresaw that its continuance would unmask their ignorance, destroy their influence, and work their ruin; hence, their opposition became as desperate as it was unintelligent and hopeless. They protested that all heresies originated in Hebrew and Greek, particularly in the latter. "The New Testament," said one of them, "is a book full of serpents and thorns. Greek is a new and recently invented language, and we must be upon our guard against it. As for Hebrew, my dear brethren, it is certain that all who learn it immediately become Jews." The monks, particularly of the Dominican order, pursued like beasts of prey various representatives of the new learning. They were met, however, with a spirit of courage and truth before which they had to recoil. Their ignorance and depravity were unmasked by Reuchlin and Erasmus. Almost crushing was the effect of a satire known as "The Letters of Obscure Men," and put forth by a coterie of humanists, of whom Ulric von Hütten was the leader. With irresistible wit this satire exposed the profligacy, gross ignorance, coarse gluttony, and blind fanaticism of the monks. They

staggered under the blow, and no other attack so effectually broke their hold upon the people.

There are two or three humanists whose labors for the cause of learning and Christianity are worthy of consideration. At the same time, we shall get further views of this conflict with the monks, and of the sad condition of the Church.

(A.) AGRICOLA.

This able scholar, the father of German humanism, was born, in 1443, near Groningen, Germany. His real name was Husmann (that is, houseman or husbandman), which, according to a custom of the humanists, he Latinized into Agricola. For a time he was a pupil of Thomas à Kempis; then he passed several years at the University of Louvain; subsequently he studied at Paris, and afterward in Italy, where he attended lectures of the most celebrated literary men of the age. His learning and eloquence gave him a wide reputation; and, upon his return to Germany, several cities and courts vied with one another in the effort to secure his services. At length, upon the solicitation of Dalberg, Bishop of Worms, who was an old and intimate friend, he established himself at Heidelberg. He divided his time between private studies and public lecturing; and, through his labors and influence, he was largely instrumental in transplanting the learning of Italy into his native land. "At a time," says Raumer, "when the worst Latin prevailed in Germany, and such a degree of ignorance that good Latin was not in the least appreciated, and bad taste was admired, it was Agricola alone who began to feel those mistakes, and to have a desire for a better

form of speech." He understood French and Italian, and set great store by his mother-tongue. At the age of forty-one he began the study of Hebrew, in order to be able to read the Old Testament in the original.

The following extract will not be without interest, as showing Agricola's opinion of the schools of his time. Having been called to take charge of a school at Antwerp, he writes: "A school is to be committed to me. That is a difficult and vexatious thing. A school is like a prison, in which there are blows, tears, and groans without end. If there is anything with a contradictory name, it is the school. The Greeks named it *schola*—that is, leisure; the Latins, *ludus literarius*—literary play; but there is nothing further from leisure than the school, nothing harder and more opposed to play. More correctly did it receive from Aristophanes the name *phrontizerion*—that is, place of care."

He refused the school offered him, but he gave the authorities of Antwerp the following sensible advice: "It is necessary to exercise the greatest care in choosing a director for your school. Take neither a theologian nor a so-called rhetorician, who thinks he is able to speak of everything without understanding anything of eloquence. Such people make in school the same figure, according to the Greek proverb, that a dog does in a bath. It is necessary to seek a man resembling the phoenix of Achilles; that is, who knows how to teach, to speak, and to act at the same time. If you know such a man, get him at any price; for the matter involves the future of your children, whose tender youth receives with the same susceptibility the impress of good and of bad examples."

In another letter Agricola has given interesting rules in regard to study: "I advise you," he says, "to study philosophy; that is, the science that teaches justness in thought, and precision in expression. Philosophy is divided into moral and natural. Moral philosophy is to be drawn not alone from Aristotle, Cicero, and Seneca, but also from the facts of history. Thence one rises to the Bible, whose divine precepts are to serve as the rule of life. No other study has recognized clearly the end of life, and can hence claim exemption from error.

"Natural philosophy is not as necessary as moral philosophy; it is scarcely more than a means of culture.

"It is necessary to study both of these branches of philosophy in the classic authors, in order to learn at the same time the art of speaking well.

"I advise you to translate the classics into the mother-tongue as exactly as possible. In this way one learns to find easily the necessary Latin expressions for what one has thought in his own language.

"It is necessary to ponder well in the mother-tongue what is to be written in Latin; and, before seeking ornaments of style, we should learn to write correctly.

"Whoever wishes to study with success must exercise himself in these three things: in getting clear views of a subject; in fixing in his memory what he has understood; and in producing something from his own resources.

"It is necessary to read with care, and to seek to understand the scope as well as the details of books. Nevertheless, it is not well to spend too much time in clearing up obscurities; one often finds their elucidation further on. One day gives light to another.

"It is necessary to exercise one's self in composition; when we produce nothing, what we have learned remains dead. The knowledge that we acquire ought to be like seed sown in the earth, germinating and bearing fruit.

"But to produce, two things are needed: ability to arrange at pleasure the ideas committed to our memory, and then ability to deduce something new from what we already know.

"In order to invent, it is very important that we have general ideas, under which all our knowledge may be classified. Then it is a great help to know how to analyze and consider a subject in all its aspects. . . . Whoever understands well these two things, classification and analysis, may attain to the facility of speech characteristic of the Greek sophists, and speak extemporaneously upon a given subject as long as he wishes."

(B.) REUCHLIN.

Reuchlin may be justly regarded as the father of modern Hebrew studies. When he published his Hebrew grammar, in 1506—the first work of the kind produced in Germany—he did not make a mistake in repeating the well-known boast of Horace: "*Exegi monumentum aere perennius*"—"I have erected a monument more durable than brass." He was born at Pforzheim, Germany, in 1455. In 1473 he went to the University of Paris, where he studied Greek under a native, and made the acquaintance of John Wessel. His religious views were molded to some extent by Wessel, of whom Luther has said: "If I had known the writings of Wessel, my adversaries could say that I have only

followed him, so much do our minds agree. I experience great joy, and I do not doubt the truth of my teachings, when I see how we are constantly in harmony, and say the same things almost in the same words."

After leaving Paris, Reuchlin taught philosophy, Latin, and Greek at Basel; subsequently he became professor at Tübingen. In 1498 he was sent to Italy on an embassy; and, on the occasion of a solemn audience before the papal court, he delivered an address in such admirable Latin that the pope exclaimed, "This man certainly deserves to rank with the best orators of France and Italy!" While in Rome, Reuchlin employed all his leisure in studying Hebrew under a learned Jew, and in collecting Greek and Hebrew manuscripts. At this time Argyropolos, a distinguished Greek, was delivering lectures in Rome upon the literature of his native country. As Reuchlin one day entered the hall with a number of his friends, he was asked by the lecturer whence he came, and if he understood Greek. He replied, "I am a German, and not wholly unacquainted with your language." He was given a copy of "Thucydides," and requested to explain it. This he did with such ease and eloquence that Argyropolos exclaimed in astonishment, "Our fugitive and exiled Greece has already fled beyond the Alps!"

The motive that urged him to prosecute his studies in Hebrew is thus explained by Reuchlin, in a letter to Cardinal Hadrian: "I devoted myself to the Hebrew language because I perceived the great value which it would have for religion and true theology. To this end I have always directed my labors, and continue to direct them more than ever. As a true worshiper of our Lord,

I have done all for the restoration and glorification of the true Christian Church."

"But Reuchlin," says D'Aubigné, "endeavored to promote the cause of truth as much by his life as by his writings. By his lofty stature, his commanding person, and his engaging address, he immediately gained the confidence of all with whom he had to deal. His thirst for knowledge was only equaled by his zeal in communicating what he had learned. He spared neither labor nor money to introduce into Germany the editions of the classic writers as they issued from the Italian presses, and thus the usher's son did more to enlighten his fellow-countrymen than rich corporations or mighty princes. His influence over youth was very extensive, and who can estimate all that the Reformation owes to him in that respect?" Melancthon, the illustrious collaborator of Luther, was his adopted son and pupil.

In the year 1510 began a prolonged and acrimonious controversy about Hebrew literature. A baptized Jewish rabbi, John Pfefferkorn, with the zeal of a proselyte, appealed to the Emperor Maximilian to have all Jewish books except the Bible destroyed. Reuchlin, having been solicited to give his opinion, advised the destruction of only such books as were written against Christianity. "The best way," he added, "to convert the Israelites would be to establish two professors of the Hebrew language in each university, who should teach the theologians to read the Bible in Hebrew, and thus refute the Jewish doctors." This position exposed Reuchlin to the most virulent attacks from the monks; but the friends of learning rallied to his support, and after nine years' conflict gave him the victory.

Luther appreciated the importance of Reuchlin's work, and wrote to him shortly after the defeat of the Dominican monks as follows: "The Lord has been at work in you, that the light of holy Scripture might begin to shine in that Germany where for so many years, alas! it was not only stifled but entirely extinct."

(C.) ERASMUS.

Erasmus was, perhaps, the acutest scholar of his day. In his early youth he exhibited unusual precocity, and gave promise of future distinction. When a young pupil at Deventer, he was one day enthusiastically embraced by his teacher with these words, "You will one day attain the highest summit of knowledge." Agricola, who saw him at the age of twelve years, was so impressed by the young scholar's appearance that he said to him, "You will one day become a great man." These predictions were fulfilled.

Erasmus was born at Rotterdam, in 1467. Having been left an orphan at an early age, he was placed in a convent by his guardians with a view, it is said, of seizing upon his patrimony. Though life in a monastery was distasteful to him beyond measure, he prosecuted his studies with extraordinary zeal. He made considerable attainments in Greek, which he taught himself, while his Latin was as polished as Cicero's. Having been sent to the University of Paris by the Archbishop of Cambray, he studied theology and literature with great success. Afterward he traveled in England, France, and Germany, everywhere receiving the homage accorded to native genius and vast acquirements. In Italy tempting positions were offered him by the pope and by mem-

bers of the papal court ; but, rejecting all overtures that might compromise his independence, he located at Basel, in the hope of learned leisure and retirement. In this he was disappointed ; for he was dragged into religious controversies, which cost him his popularity and peace of mind, and filled his latter days with bitterness.

Erasmus contributed to the Reformation in several ways. At a time of religious persecution, he preached a tolerance far in advance of his day. He advocated orthodoxy in Christian life rather than in speculative theology. "Let us have done," he says, "with theological refinements. There is an excuse for the fathers, because the heretics forced them to define particular points ; but every definition is a misfortune, and for us to persevere in the same way is sheer folly. Is no man to be admitted to grace who does not know how the Father differs from the Son, and both from the Spirit ? or how the nativity of the Son differs from the procession of the Spirit ? Unless I forgive my brother his sins against me, God will not forgive me my sins. Unless I have a pure heart—unless I put away envy, hate, pride, avarice, lust—I shall not see God. But a man is not damned because he can not tell whether the Spirit has one principle or two. Has he the fruits of the Spirit ? That is the question. Is he patient, kind, good, gentle, modest, temperate, chaste ? Inquire if you will, but do not define. True religion is peace, and we can not have peace unless we leave the conscience unshackled on obscure points on which certainty is impossible."

The most valuable service that Erasmus rendered the Reformation was his publication of the New Testament in Greek. It was a scholarly work, and one of the most

beautiful fruits of the revival of letters. The work was undertaken in the interests of a purer Christianity. "It is my desire," he said, in his preface, "to lead back that cold dispute about words called theology to its real fountain. Would to God that this work may bear as much fruit to Christianity as it has cost me toil and application!"

Though accomplishing no little for the purification of the Church, Erasmus was by no means qualified to become a thorough reformer. He lacked courage and heroic devotion to truth. "As to me," he confessed frankly, "I have no inclination to risk my life for the truth. We have not all strength for martyrdom; and, if trouble come, I shall imitate St. Peter. Popes and emperors must settle creeds. If they settle them well, so much the better; if ill, I shall keep on the safe side." To this confession corresponded his conduct when the conflicts of the Reformation began. He avoided taking a positive stand. Finally, by his indecision and duplicity, he lost the confidence of both Lutherans and Romanists, and exposed himself to bitter attacks from both parties.

In his numerous writings, Erasmus has repeatedly touched upon educational topics. He always displays keenness of penetration and soundness of judgment. He thus inveighs against the superficial imitation of Cicero then prevalent: "You are charged," he says to the Ciceronians, "with a very difficult task; for, besides the errors of language that have escaped Cicero, the copyists have sown his works with a multitude of mistakes, and many of the writings attributed to this author are not authentic. Finally, his verses translated from

the Greek are worth nothing. And you would imitate all that, the good and the bad, the authentic and the non-authentic! Certainly, your imitation is very superficial; it is unworthy of your master. Your imitation is servile, cold, and dead, without life, without movement, without feeling; it is an apishness in which one discovers none of the virtues that have made the glory of Cicero, such as his happy inspiration, the intelligent disposition of his subjects, the wisdom with which he treats each subject, his large acquaintance with men and affairs, and his ability to move those who hear him. These are what should be imitated in Cicero; and, in order to imitate him, we must, like him, identify ourselves with the age in which we live, that we may be able to adapt our language to it; otherwise, our speech has no longer that seal of reality which animated the discourse of Cicero."

In reference to reading an author in class, Erasmus says: "The teacher ought to explain only what is strictly necessary for understanding the author; he ought to resist the temptation of making on every occasion a display of his knowledge. The end of this rule is to concentrate the attention of the pupil upon his author, to bring him into contact with him. Too many digressions break the force of the author, and prevent the pupil from feeling and enjoying that inspiration, so well suited to quicken him who breathes it freely."

Erasmus advocated the study of history, geography, natural history, and agriculture. In doing so, he was in advance of his time. Yet he found the worth of these studies, not in themselves, but in the light they would throw upon classic literature. Luther, who was probably the first to recognize the intrinsic worth of the natural

sciences, says: "We are at the dawn of a new era, for we are beginning to recover the knowledge of the external world that we had lost since the fall of Adam. Erasmus is indifferent to it; he does not care to know how fruit is developed from the germ. But, by the grace of God, we already recognize in the most delicate flower the wonders of divine goodness and the omnipotence of God. We see in his creatures the power of his word. He commanded, and the thing stood fast. See that force display itself in the stone of a peach. It is very hard, and the germ that it incloses is very tender; but, when the moment has come, the stone must open to let out the young plant that God calls into life. Erasmus passes by all that, takes no account of it, and looks upon external objects as cows look upon a new gate."

2. *THE RELATION OF THE REFORMATION TO EDUCATION.*

(A.) THE CONDITION OF THE CHURCH.

After the foregoing sketch of concurring circumstances, particularly of the revival of letters, we return to the Reformation itself. In order to appreciate fully its great influence upon education, it is necessary to have a clear conception of the sad condition of the Church and schools at the opening of the sixteenth century. In our study of humanism, we have seen the skepticism prevailing at the court of Leo X., and the ignorance and vice existing in the monasteries. The same unnatural and ruinous elements were found in all ranks of the Church. It was a time of great moral and intellectual

degeneracy. Learning had died out among the clergy ; the schools were neglected ; superstition and ignorance characterized the masses. We will let contemporaries present the details of this sorrowful picture. A distinguished theologian of Germany, writing in 1503, says : "The study of theology is despised ; the gospel of Christ, as well as the admirable writings of the fathers, is neglected ; of faith, piety, temperance, and other virtues, praised even by the better heathen ; of the miracles of God's grace toward us, and of the merits of Christ, there is profound silence. And such people, who understand neither philosophy nor theology, are elevated to the highest dignities of the Church, and are made bishops of souls. Hence the pitiable decline of the Christian Church, the contempt of the clergy, and the utter want of good teachers. The infamous life of the clergy deters honest parents from consecrating their sons to this office. They completely neglect the study of holy Scripture, lose taste for its beauty and power, become lazy and lukewarm in their office, and content themselves with dispatching divine service as quickly as possible. With a man who owes them money, they speak more earnestly and circumspectly than with their Creator. Oppressed with a sense of weariness in their office, they turn to play, rioting, and debauchery, without minding in the least the popular contempt. How can it be possible, under the circumstances, for the laity to respect them and religion at all ? The gospel calls the way to heaven narrow, but they make it broad and jovial."

After visiting the churches and schools of Thuringia, by order of the Elector John, Melancthon writes :

"What can be offered in justification, that these poor people have hitherto been left in such great ignorance and stupidity? My heart bleeds when I regard this misery. Often when we have completed the visitation of a place, I go to one side and pour forth my distress in tears. And who would not mourn to see the faculties of man so utterly neglected, and that his soul, which is able to learn and grasp so much, does not even know anything of its Creator and Lord?"

After the visitation of the churches of Saxony, in 1528, Luther wrote in the preface of his "Small Catechism": "The pitiable need which I recently witnessed, as visitor, has compelled me to prepare this catechism on Christian doctrine in such simple form. Alas! what a sad state of things I witnessed! The common people, especially in the villages, are utterly ignorant of the Christian doctrine; even many pastors are wholly unqualified to teach; and yet all are called Christians, are baptized, and partake of the sacrament, knowing neither the Lord's Prayer, the Creed, nor the Ten Commandments, and living and acting like irrational beasts. Nevertheless, now that the precious gospel has appeared again, they readily learn to abuse all freedom. O you bishops! how will you ever answer to Christ for having so shamefully neglected the people, and for not having exercised one moment your office that you might escape all evil?"

Another passage or two from Luther must suffice, in addition to what has already been said, to indicate the wretched state of education at the time of the Reformation. "Is it not truly pitiable," he says, "that a boy has been obliged to study twenty years or longer to learn

enough bad Latin to become a priest and read mass? And whoever has accomplished that has been called blessed, and blessed the mother who has borne such a child; and yet he has remained a poor, ignorant man all his life long, unfit for any useful vocation. Such teachers and masters we have been obliged to have everywhere, who have known nothing themselves, and have been able to teach nothing good or useful; yea, they have not known the way in which one should learn and teach." Elsewhere he says: "Is it not obvious that a boy can now be instructed so that he knows more in his fifteenth or eighteenth year than all the universities and convents have hitherto known? Yea, what have they taught in the universities and convents but to become blockheads? A man has studied twenty, forty years, and has learned neither Latin nor German. Of the shameful, licentious life, by which the generous youth have been destroyed, I say nothing."

(B.) PRINCIPLES OF PROTESTANTISM.

The fundamental principles of Protestantism are favorable to education. The two great truths underlying the Reformation are—1. Man is justified by faith alone; 2. The Bible is the only rule of religious faith and practice. In the Protestant Church, all become by faith kings and priests unto God. The only mediator between God and man is Jesus Christ; and, through him, all believers, without the intervention of priest, saint, or pope, have immediate access to the Father. With the Scriptures and his conscience for guides, every man is elevated to the freedom and dignity of ordering his own religious life. The feeling of individual responsibility

is awakened, and the spirit of inquiry fostered. Intelligence becomes a necessity. The Bible must be studied; teachers must be provided; schools must be established. Protestantism becomes the mother of popular education.

Justification by faith goes further. It makes Christ, and not the Church, the center of Christianity. Personal union with him constitutes the Christian. Religion consists in exemplifying his principles in all the relations of life; in being pure, humble, temperate, honest, loving; in being like the great Teacher himself. It involves a thorough transformation of individual character. It does not withdraw man from the ordinary callings and relations of life; it makes him a steward of God in the world, and exalts his daily labors in the household, in the school-room, in the workshop, on the farm, into a divine service. The Protestant view restores Nature, as a subject of investigation, to its rights. The whole circle of knowledge—whatever is elevating, whatever prepares for useful living—is held in honor. Primary and secondary schools are encouraged; the best methods of instruction, based upon a study of man's nature and not upon the interests of the Church, are sought out; education is based upon a broad and solid foundation. Protestantism is the friend of universal learning.

"In rendering man responsible for his faith, and in placing the source of that faith in holy Scripture," says Michel Bréal, an able French scholar, "the Reformation contracted the obligation of placing every one in a condition to save himself by reading and studying the Bible. Instruction became then the first of the duties of charity; and all who had charge of souls, from the father of a

family to the magistrates of cities and to the sovereign of the state, were called upon, in the name of their own salvation, and each according to the measure of his responsibility, to favor popular education. Thus Protestantism, by a connection of ideas whose philosophic value can not be here discussed, but whose practical consequences were of inestimable value, placed in the service of education the most effective stimulus and the most powerful interest that can be brought to bear upon men."

3. *THE REFORMERS.*

(A.) LUTHER.

The greatest of the Reformers, whether we consider his relation to the Church or to education, was Martin Luther. Carlyle has paid him a glowing tribute. "I will call this Luther," he says, "a true great man ; great in intellect, in courage, affection, and integrity ; one of our most lovable and precious men. Great not as a hewn obelisk, but as an Alpine mountain, so simple, honest, spontaneous, not setting up to be great at all ; there for quite another purpose than being great ! Ah, yes, unsubduable granite, piercing far and wide into the heavens ; yet in the clefts of it fountains, green and beautiful valleys with flowers ! A right spiritual hero and prophet ; once more a true son of Nature and fact, for whom these centuries, and many that are to come yet, will be thankful to Heaven."

Luther was born at Eisleben, Germany, November 10, 1483. His father was a miner in humble circumstances. The home-training which he received was se-

vere and hardening. His father sometimes whipped him "for a mere trifle till the blood came." At school, he came under the prevalent cruel discipline, and was flogged, as he tells us, fifteen times during a single forenoon. After studying at schools in Magdeburg and Eisenach, he entered the University of Erfurt at eighteen, and in three years took his degree of Master of Arts. He was designed by his father for the law; but, finding a copy of the Bible in the university library one day, he was moved by its contents, and resolved upon devoting himself to the monastic life. He entered the Augustinian convent at Erfurt. Here he spent three years in profound study, passed through great spiritual trials, and laid the foundation of those doctrinal convictions which were shortly to shake the world. In 1508 he was called to a chair in the University of Wittenberg, and the following year he commenced lecturing upon the holy Scriptures. "This monk," said the rector of the university, "will puzzle our doctors and bring in a new doctrine." About the same time he began to preach, profoundly moving his hearers. "His words," Melancthon said, "were born not on his lips but in his soul." In 1511 he made a visit to Rome, and observed the profligacy of the papal court. After his return to Wittenberg the sale of indulgences by Tetzel aroused his indignation, and he prepared ninety-five theses, in which he maintained that only God can forgive sin. He nailed his theses to the church-door, October 31, 1517, and offered to defend them against the world. This was the birth-hour of the Reformation. He was soon brought to open rupture with the Church, and in 1521 he was summoned before the Imperial Diet at Worms to answer

for his doctrines. It was here that he made that noble declaration which marks a turning-point in history, and ushers in the era of personal freedom. Confronted by the authority of the pope, the opinions of Church fathers, and the decrees of councils, Luther was called upon to recant. "Unless I am proved to be in error," he replies, "by testimony from Holy Writ, or by clear and overpowering reasons, I can not and will not recant, because it is neither safe nor advisable to do anything against conscience. Here I stand; I can not do otherwise. God help me. Amen!"

It would extend this sketch too far to follow Luther through all the mighty labors and struggles of his subsequent conflict with the papacy. The result is well known. Sustained by the almighty Power upon which he so confidently relied, he conducted the Reformation to a successful issue. Civil and religious liberty were given to the world. In spite of the rage of his enemies, he was permitted to pass away peacefully in 1546.

The necessities of the Reformation gave Luther an intense interest in education. The schools of the time, already inadequate in number and defective in method, were crippled during the early stages of the Reformation by the excited and unsettled condition of society. A new generation was growing up without education. The establishment of schools became a necessary measure for the success and permanence of the Reformation. The appeal had been made to the Word of God, and it was necessary to teach the masses to read it. Preachers and teachers were needed for the promulgation and defense of the gospel; enlightened and pious rulers, for the government of city and state. As early as 1524,

Luther made an appeal of marvelous energy to the authorities of the German cities for the establishment of schools. If we consider its pioneer character, in connection with its statement of principles and admirable recommendations, the address must be regarded the most important educational treatise ever written. ✓

With Luther education was not an end in itself, but a means to more effective service in church and state. If people or rulers neglect the education of the young, they inflict an injury upon both church and state; they become the enemies of God and man; they advance the cause of Satan, and bring down upon themselves the curse of Heaven. This is the fundamental thought that underlies all Luther's writings upon education. The following extract presents his views in brief compass: "The common man," he says, "does not think that he is under obligation to God and the world to send his son to school. Every one thinks that he is free to bring up his son as he pleases, no matter what becomes of God's word and command. Yea, even our rulers act as if they were exempt from the divine command. No one thinks that God has earnestly willed and commanded that children be brought up to his praise and work—a thing that can not be done without schools. On the contrary, every one hastens with his children after worldly gain, as if God and Christianity needed no pastors and preachers, and the state no chancellors, councilors, and scribes."

In his letter to the councilors of the German cities, Luther says: "But even if there were no soul, and we had not the least need of schools and the languages for the sake of the Scriptures and of God, this one reason

should suffice to cause the establishment of the very best schools everywhere, both for boys and girls, namely, that the world needs accomplished men, and women also, for maintaining its outward temporal prosperity, so that the men may be capable of properly governing the country and people, and the women of superintending the house, children, and servants. Now, such men must come of boys, and such women of girls; therefore, the object must be rightly to instruct and educate boys and girls for these purposes."

Luther wisely insisted upon the maintenance of family discipline as a measure of public safety and prosperity. "What is a city," he asks, "other than a collection of families? How, then, can a city be well governed, where there is no government in the family; yea, where neither child nor servant is obedient? Likewise, a district; what is it other than a collection of cities, towns, and villages? Where now the families are badly governed, how can a whole district be well governed? Yea, the result must be tyranny, witchcraft, murder, theft, disobedience. Again, a principality is a collection of districts and duchies, a kingdom a collection of principalities, an empire a collection of kingdoms. These are all composed of separate families. Where now father and mother govern badly, and let children have their own way, there can neither city, town, village, district, principality, kingdom, nor empire be well and peacefully governed. For the son will become a father, judge, mayor, prince, king, emperor, preacher, school-master; if he has been badly brought up, the subjects will become like their master, the members like their head."

Luther set a high estimate upon the office of teaching. "Where would preachers, lawyers, and physicians come from," he asks, "if the liberal arts were not taught? From this source must they all come. This I say, no one can ever sufficiently remunerate the industrious and pious teacher that faithfully educates children, as the heathen Aristotle has said. And yet people shamefully despise this calling among us, as if it were nothing, and at the same time they pretend to be Christians! If I were obliged to leave off preaching and other duties, there is no office I would rather have than that of school-teacher; for I know that this work is with preaching the most useful, greatest, and best: and I do not know which of the two is to be preferred. For it is difficult to make old dogs docile and old rogues pious, yet that is what the ministry works at, and must work at, in great part, in vain; but young trees, although some may break, are more easily bent and trained. Therefore, let it be one of the highest virtues on earth faithfully to educate the children of others who neglect it themselves."

Luther justly looked upon learning as a source of wealth and power to a community. "Therefore it will be proper for the civil authorities," he says, "to exercise the greatest possible care and industry in regard to the young; for, since the interests of the city are committed to their trust, they would not do well before God and the world if they did not seek with all their might to promote its prosperity. Now, the prosperity of a city does not consist alone in vast treasures, strong walls, beautiful houses, large supplies of muskets and armor; yea, when these things are found, and fools exercise

authority, it is so much the worse for the city. The best and richest treasure of a city is that it have many pure, learned, intelligent, honest, well-educated citizens, for these can collect, preserve, and properly use whatever is good."

There is scarcely any phase of education that Luther left untouched. Everywhere he exhibited the same strong good sense. "If we survey the pedagogy of Luther in all its extent," says Dittes, "and imagine it fully realized in practice, what a splendid picture the schools and education of the sixteenth century would present! We should have courses of study, text-books, teachers, methods, principles, and modes of discipline, schools and school regulations, that could serve as models for our own age. But, alas! Luther, like all great men, was little understood by his age and adherents; and what was understood was inadequately esteemed, and what was esteemed was only imperfectly realized."

Luther could not devote himself directly or chiefly to the cause of education. As was once the case with the apostle Paul, "the care of all the churches" was upon him. It was through his writings and personal influence that he affected education. The great need he saw during the visitation of the churches in Saxony led him, in 1529, to prepare his catechisms for the instruction of both clergy and laity. In 1534 he published his translation of the Bible, which had an almost incredible educational influence upon Germany. The people seized upon it with avidity, and in the course of a few years nearly half a million copies were in circulation. It fixed the German language, which had previously been broken up into rival dialects. A Roman writer of the time says:

"Even shoemakers, women, and ignorant people, who have learned only a little German, are eagerly reading the New Testament as the fountain of all truth; and that, moreover, with such frequency that they know it by heart. They also carry it about in their pockets, and in this way conceive in a few weeks such a high opinion of their knowledge that they dispute not only with Catholic laymen, but with the priests and monks, and even with doctors of theology, about faith and the gospel."

Luther's efforts in behalf of education were not fruitless. All Protestant Germany was aroused by his appeals. In 1525 he was commissioned by the Duke of Mansfield to establish two schools in his native town, Eisleben, one for primary and the other for secondary instruction. Both in the course of study, and in the methods of instruction, these schools became models after which many others were fashioned. As a direct and comprehensive result of Luther's educational endeavors, the forms of church government adopted by the various Protestant cities and states contained provisions for the establishment and management of schools. In a few years the Protestant portion of Germany was supplied with schools. They were still defective in almost every particular; but, at the same time, they were greatly superior to any that had preceded them. Though no complete system of popular instruction was established, the foundation for it was laid. To this great result Luther contributed more than any other man of his time; and this fact makes him the leading educational reformer of the sixteenth century.

(B.) MELANCHTHON.

Philip Melanchthon has been honored with the title *Preceptor Germaniæ*. Excepting Luther, no other reformer did so much for education in Germany. His real name was Schwarzerd, meaning *black earth*; but this was translated by Reuchlin into the more euphonious Greek equivalent, Melanchthon. He was born at Bretten, Germany, in 1497, where he received his early education from a strict but faithful schoolmaster. "I had a teacher," he tells us, "who was an excellent grammarian, and held me rigidly to grammar. Whenever I made mistakes I received blows, yet with moderation. In this way he made a grammarian out of me. He was a good man; he loved me as his son, and I him as my father."

His precocity and thirst for knowledge were remarkable. Reuchlin admired the young scholar's ability, and one day playfully brought him a doctor's hat. Erasmus had a high opinion of him. "My God!" he exclaimed, "what promising hopes does Philip Melanchthon give us, who, yet a youth, yes almost a boy, deserves equal esteem for his knowledge of both languages! What sagacity in argument, what purity of expression, what a rare and comprehensive knowledge, what extensive reading, what a delicacy and elegance of mind does he not display!"

Melanchthon attended the University of Heidelberg, and took his bachelor's degree there at the age of fifteen. About this time he prepared a Greek grammar, which was not published, however, till several years later. He spent six years at the University of Tübingen.

gen, first as a student and afterward as a lecturer. In 1518 he was called to the chair of Greek at the University of Wittenberg. His small stature, youthful look, and timid manner, made at first an unfavorable impression; but his introductory lecture captivated his hearers, and established his reputation. Luther, in particular, was delighted, and wrote to his friend Spalatin as follows: "Philip delivered a very learned and chaste address on the fourth day after his arrival, and that too with such applause and admiration on every side, that you need not trouble yourself further in commending him to us. We must look away from his exterior appearance; we rejoice in his gifts, at the same time that we are amazed at them; and we heartily thank our gracious prince, as well as your own assistance."

A warm affection and lasting intimacy soon sprang up between Luther and Melanchthon. They were complements of each other. This fact has been well exhibited by D'Aubigné in the following parallel: "Luther possessed warmth, vigor, strength; Melanchthon, clearness, discretion, and mildness. Luther gave energy to Melanchthon, Melanchthon moderated Luther. They were like substances in a state of positive and negative electricity, which mutually act upon each other. If Luther had been without Melanchthon, perhaps the torrent would have overflowed its banks; Melanchthon, when Luther was taken from him by death, hesitated and gave way, even where he should not have yielded. Luther did much by power; Melanchthon perhaps did no less by following a gentler and more tranquil method. Both were upright, open-hearted, generous; both ardently loved the Word of eternal life, and obeyed it with

a fidelity and devotion that governed their whole lives."

During his whole life Melanchthon was a student of remarkable industry. He often arose as early as two or three o'clock in the morning to pursue his studies, and many of his works were written between that hour and dawn. Literature was his passion, and it was against his will that he was drawn into theological controversy. On one occasion a Frenchman visited him at his home in Wittenberg. He found Melanchthon in the nursery, where he was rocking the cradle with one hand, while he held a book in the other. Observing the surprise of his guest, Melanchthon praised domestic life, and the gratitude of children toward God, in such appreciative terms that the stranger went away greatly edified.

Melanchthon earnestly desired the diffusion of learning. "I apply myself solely to one thing," he says, "the defense of letters. By our example we must excite youth to the admiration of learning, and induce them to love it for its own sake, and not for the advantage that may be derived from it. The destruction of learning brings with it the ruin of everything that is good—religion, morals, and all things human and divine. The better a man is, the greater his ardor in the preservation of learning; for he knows that of all plagues ignorance is the most pernicious." He says again: "To neglect the young in our schools is just like taking the spring out of the year. They, indeed, take away the spring from the year who permit the schools to decline, because religion can not be maintained without them. And a terrible darkness will fall upon society, if the study of the sciences should be neglected!"

Melanchthon exerted an influence upon the educational progress of Germany in various ways. First of all, he was an able teacher, whose instruction was largely attended. Two thousand students, from all parts of Europe, thronged his lecture-room at Wittenberg, and bore away the precious seed both of the gospel and of ancient learning. His personal relations with students were peculiarly cordial. He welcomed them to his home, and gave them individual encouragement and aid. "I can truthfully affirm," he says, "that I love all the students with a fatherly affection, and feel the greatest solicitude for their welfare." Many of the leading educators of Protestant Germany, among whom may be mentioned Camerarius, Michael Neander, and Trotzen-dorf, were once his students. He contributed to the advancement of learning by his text-books. Besides a Greek and a Latin grammar, he published works on logic, ethics, rhetoric, and physics, and prepared annotated editions of the principal ancient classics. These works, written in a clear and scientific form, soon became popular, and some of them held their place in the schools for more than a hundred years. To him we are indebted for the well-known definition, "Grammar is the science of speaking and writing correctly."

To Melanchthon belongs the honor of having produced the first work on dogmatic theology in the Protestant Church. It appeared in 1521, and is known as the *Loci Communes*. Luther set a high estimate upon this work. "Whoever wishes to become a theologian now," he says, "enjoys great advantages; for, first of all, he has the Bible, which is so clear that he can read it without difficulty. Then let him read in addition

the *Loci Communes* of Melancthon ; let him read them diligently and well, that he may impress them upon his mind. If he has these two things, he is a theologian, from whom neither the devil nor heretics shall be able to take away anything. To him the whole field of theology lies open, so that he is able to read anything he pleases after that with edification."

In 1528 Melancthon drew up the "Saxony School Plan," which served as the basis of organization for many schools throughout Germany. Among other things, he says: "There are now many abuses in the schools. In order that the young may be properly taught, we have prepared this form: First, the teachers should see to it that the children learn only Latin, not German, or Greek, or Hebrew, as some have hitherto done, burdening the children with a multiplicity of studies that were not only unfruitful, but even hurtful. It is also plain that such teachers do not consider the good of the children, but take up so many studies for the sake of reputation. Secondly, the teacher should not burden the children with too many books, and should, in every way, avoid multiplicity in his instruction. Thirdly, it is necessary that the children be divided into classes." Three classes or grades are recommended. In the first, reading, writing, music, the Creed, and the Lord's Prayer were to be taught; in the second, Latin grammar and the easier Latin authors, in connection with continued religious instruction; in the third, Latin grammar was completed, the more difficult Latin authors were taken up, and versification, rhetoric, and logic were introduced. Latin, at length, became the language of daily intercourse.

(C.) ZWINGLI AND CALVIN.

A few words must suffice for the other leading reformers. Zwingli and Calvin both appreciated the importance of education, and contributed directly to its advancement. The ecclesiastical polity which Calvin established in Geneva, in 1541, provided teachers to give instruction in the ancient languages. As early as 1524, the same year that Luther made his appeal to the authorities of the German cities, Zwingli published a little work on teaching, which exhibits a considerable degree of pedagogical knowledge, and contains some valuable suggestions. As with all the reformers, religious instruction is made prominent. "Although it is not in human power," he says, "to bring the heart of man to believe in God, even with an eloquence greater than that of Pericles; and, although our heavenly Father alone, who draws us to himself, can accomplish that work, yet faith, as Paul teaches, comes by hearing, namely, the hearing of the Word of God. Therefore, we must seek to instill faith in youth by the clearest and commonest words from the mouth of God, at the same time praying that He who alone begets faith would enlighten him whom we instruct. It also seems to me not discordant with the teaching of Christ, if we lead the young through visible things to the knowledge of God, placing before their eyes the beauties of the whole world, and showing them under the mutations of Nature the immutable Being who holds the manifold world in such admirable order. Then we may lead them to see that it is not possible for Him, who has so wisely and beautifully ordered all things, to neglect the work of his

hands, since even among men we blame the father who does not watch over and provide for his household. Thus will the young understand that the providence of God is over all things, and orders all things without growing weary. If the human spirit has once been properly instructed in this way, it can never fall into undue anxiety or hurtful lusts; for it then knows that all things are to be obtained from God, and that it would be an offense to desire from him anything unworthy."

4. ABSTRACT THEOLOGICAL EDUCATION (1550-1700).

After the Reformation, the stream of history broadens and deepens. Various influences, often in conflict with one another, control the course of events. During the period extending from the middle of the sixteenth to the beginning of the eighteenth century, three leading tendencies are apparent in education. These may be characterized as the theological, the humanistic, and the practical. As the theological tendency, however, maintained an ascendancy over the others in the schools, it is allowed to give name to the period. The humanistic tendency, which was not very marked, was an echo from the revival of learning. The practical tendency was a reaction against the sterile learning cultivated by theology and humanism.

The period under discussion was one of extraordinary theological activity. A large share of the intellectual strength of the age was turned to theology. Every phase of religious truth, particularly in its doctrinal and speculative aspects, was brought under inves-

tigation. Theology was elevated into a science, and doctrinal systems were developed with logical precision, and extended to trifling subtleties. "Theology was most fully developed," says Kurtz, in speaking of the seventeenth century, "and reared like a mighty Gothic dome with astonishing acuteness, harmonious in its minutest parts, and firmly knit together as a whole. But the tendency to an extremely subtile development and precise definition of doctrines, which sprang from the controversies of the preceding century, became continually more *one-sided*. Hence, it called into existence a dialectic scholasticism, which was in no way inferior to that of the most flourishing period of the middle ages, either in the greatness or minuteness of the careful and acute development of its scientific form, or in the full and accurate exhibition of its religious contents."

But this great effort to reduce the whole body of religious truth to an infallible logical statement was attended with unfortunate results. Theologians became bigoted and intolerant. In their efforts to give Christian doctrine a scientific form, they lost its spirit. Losing its earlier freedom and life, Protestantism degenerated in large measure into what has been called "dead orthodoxy." The intellectual apprehension of elaborate creeds was made the basis of Christian fellowship. Christian life counted for little, and the Protestant world broke up into opposing factions. Says Kurtz, who is disposed to apologize for this period as far as possible: "Like mediæval scholasticism, in its concern for logic theology almost lost vitality. Orthodoxy degenerated into orthodoxy; *externally*, not only discerning essential diversities, but disregarding the broad basis of a common

faith, and running into odious and unrestrained controversy; *internally*, holding to the form of pure doctrine, but neglecting cordially to embrace it, and to live consistently with it."

The schools, which stand in close relation to religion, were naturally influenced in a large measure by the theological tendencies of the age. Theological interests imposed upon the schools a narrow range of subjects, a mechanical method of instruction, and a cruel discipline. The principle of authority, exacting a blind submission of the pupil, prevailed in the schools of every grade. The young were regarded, not as tender plants to be carefully nurtured and developed, but as untamed animals to be repressed and broken. "Education," says Dittes, "in the form that it had assumed in the sixteenth century, could not furnish a complete human culture. In the higher institutions, and even in the wretched town schools, Latin was the Moloch to which countless minds fell an offering in return for the blessing granted to a few. A dead knowledge of words took the place of a living knowledge of things. Latin school-books supplanted the book of Nature, the book of life, the book of mankind. And in the popular schools youthful minds were tortured over the spelling-book and catechism. The method of teaching was almost everywhere, in the primary as well as in the higher schools, a mechanical and compulsory drill in unintelligible formulas; the pupils were obliged to learn, but they were not educated to see and hear, to think and prove, and were not led to a true independence and personal perfection; the teachers found their function in teaching the prescribed text, not in harmoniously developing the young human

being according to the laws of Nature—a process, moreover, that lay under the ban of ecclesiastical orthodoxy. The discipline answered to the content and spirit of the instruction; it was harsh, and even barbarous; the principle was to tame the pupils, not to educate them. They were to hold themselves motionless, that the school exercises might not be disturbed; what took place in their minds, and how their several characters were constituted, the school pedants did not understand and appreciate.”

This is the darker side of the theological influence. In other particulars, it was favorable to the cause of education. It led to a multiplication of schools of various grades. Country schools, town schools, Latin schools, or gymnasia, and universities, sprang up in Protestant countries under the religious impulse, and in Catholic countries through a spirit of rivalry with their opponents. The country or village schools were connected with the local church, and were usually taught by the sexton, or some other subordinate officer. The subjects of instruction were originally the catechism and singing, but to these were subsequently added reading, writing, and arithmetic. The schools were designed for both boys and girls, who were instructed sometimes together, and sometimes separately. The following order of the Elector of Brandenburg, issued in 1573, shows us the primitive form of these schools: “Every Sunday afternoon, or, with the approval of the pastor, once during the week, the village sextons shall read to the people, but especially to the children and young servants, the Small Catechism of Luther, without change, and teach them to pray; also, they shall question them according

to convenience as to what they have learned. Likewise, before and after the reading and repeating of the catechism, they shall sing and teach the young people good, Christian, German psalms; and, where there are chapels, they shall conduct these exercises alternately in the chapels and in the parent churches, in order that the youth in all the villages may be instructed according to their need, and not be neglected."

With the town schools it was somewhat better. The range of instruction was of a higher order; the theological influence was felt in a less degree; the needs of practical life were better kept in view. But these schools were still very far from being models. They did not emancipate themselves from the mechanical methods and cruel discipline then in vogue, and the teachers, as a rule, were unfit for their vocation. "The majority of them," says Dittes, "were people who on account of bodily infirmity or mental incapacity, often also on account of laziness or dissoluteness, had suffered shipwreck in life, and had now taken to teaching as a last resort, particularly unsuccessful artisans, students, and deposed clergymen." Everywhere the teachers were poorly paid. Their salaries consisted in part of eggs and butter, and to maintain a livelihood they were forced to engage in other pursuits. "They played the violin at dances, kept beer-gardens, carried on in a small way some kind of trade, or in summer hired out as day-laborers. The school ordinances of the time contain sharp clauses in reference to the scandalous lives of the teachers, as well as against their rough discipline, and admonish them to fidelity in duty and to becoming conduct in and out of school. But this was mostly in vain;

for, where fitness is wanting among teachers, ordinances are of but little utility."

In the Latin schools humanism asserted itself by the side of theology. As indicated by the name, Latin formed the chief subject of study. The leading representatives of the humanistic tendency in the second half of the sixteenth century were Trotzendorf, Michael Neander, and John Sturm. They were all influenced by Melanchthon, with whom they maintained more or less intimate relations. As directors of celebrated schools, they exerted a strong influence upon the higher education of their time. Trotzendorf taught at Goldberg, Neander at Ilfeld, and Sturm at Strasburg. As Sturm represented most completely the humanistic tendency of his age, it is worth while to consider his educational work in some detail.

(A.) JOHN STURM.

John Sturm was born at Schleiden, Prussia, in 1507; he died at Strasburg in 1589. After teaching at Louvain and Paris, he was appointed rector of the gymnasium at Strasburg, over which he presided for forty years. He boasted of his institution that it reproduced the best periods of Athens and Rome; and, in fact, he succeeded in giving to his adopted city the name of New Athens. In religion he was a Calvinist, and he is justly regarded as the greatest educator that the Reformed Church produced during this period.

"His ideal of education," says Raumer, "we have already learned—piety, knowledge, and eloquence. He clearly knew what he wished, and with equal clearness he adopted means to its attainment. . . . The man was

of one piece, a whole man—a man of character, in whom strength of will was admirably united with force and tact in execution. Hence, it is not to be wondered at that Sturm found recognition among his cotemporaries, and enjoyed their highest confidence. In 1578 the Strasburg school numbered several thousand pupils, among them about two hundred of noble birth, twenty-four counts and barons, and three princes. Not simply from Germany, but from the most different countries, from Portugal and Poland, Denmark, France, and England, youths were sent to Sturm. But his pedagogical activity was not limited to the Strasburg Gymnasium; in wide circles he exerted by counsel and example, and through his pupils, a very great influence as a second *Preceptor Germaniæ*."

The course of study at the Strasburg Gymnasium was divided into ten classes. As this institution became a model for many other classical schools, it is well to present briefly the work of each class. We thus gain a clear insight into the Latin schools of this period, and are prepared to appreciate both their excellence and their defects:

Tenth Class.—The alphabet, reading, writing. Latin declensions and conjugations. The German or Latin catechism.

Ninth Class.—Latin declensions and conjugations continued. Memorizing of Latin words used in common life. Irregularities of formation were introduced.

Eighth Class.—Continuation of words in common use. The parts of speech. Declension and conjugation in connection with sentences. Composition of Latin phrases. Some letters of Cicero were read and ex-

plained. Toward the close of the year, exercises in style.

Seventh Class.—Latin syntax, with a few rules and examples from Cicero. Rules to be constantly applied in reading Cicero's letters. Exercises in composition. On Sunday, translation of German catechism into classic Latin, in which, however, such terms as *Trinitas*, *sacramentum*, and *baptismus* might be employed.

Sixth Class.—Review. Translation of Cicero's letters into German. Translation of Latin poetry. On Saturday and Sunday, translation of catechism, and reading of some letters of Jerome. Greek begun.

Fifth Class.—Study of words designating things unknown to the pupils. Versification. Mythology. Cicero, and Virgil's Eclogues. Greek vocabulary. Exercises in style and Latin versification. Translation of oratorical extracts into German, and afterward back into Latin. On Saturday and Sunday, one of Paul's epistles.

Fourth Class.—Well acquainted with Latin and Greek grammar, the pupils were required to read a great deal, to learn by heart, and to explain. The sixth oration against Verres was read, because it contains almost all kinds of narration. Epistles of Horace. Greek grammar continued, with reading. Exercises in style. Reviews. Reading and paraphrasing some of Paul's epistles.

Third Class.—Reviews. Rhetoric. Oration *pro Cluentio*. Select orations of Demosthenes. The Iliad or Odyssey. Paul's epistles. Exercises in style. Translation of oratorical extracts from Greek into Latin, and from Latin into Greek. Composition of poetry and let-

ters. Representation of the comedies of Plautus and Terence in the four higher classes. All the plays of these authors to be acted.

Second Class.—The pupils explained, under the direction of the teacher, the Greek orators and poets. Peculiarities of oratorical and poetical language. Remarkable passages copied. Dialectic and rhetoric studied in connection with orations of Cicero and Demosthenes. Exercises in style. Oratorical composition and declamation. Memorizing and recitation of the Epistle to the Romans. Representation of the comedies of Terence and Plautus, and some drama of Aristophanes, Euripides, and Sophocles.

First Class.—Dialectic and rhetoric continued. Virgil, Horace, Homer. Translation of Thucydides and Sallust. Weekly dramatic entertainments. All written composition to be artistic. Reading and explanation of Paul's epistles.

This course has the merit of being well fitted together, and of harmoniously tending to the desired end. It is carefully graded throughout, each class furnishing a definite preparation for the succeeding one. Yet it has obvious and serious defects. It is too narrow in its scope. An unjustifiable prominence is given to Latin and Greek, while many other important studies are wholly neglected. History, mathematics, natural science, and the mother-tongue are ignored. A great gap is left between the gymnasium and life—a gap that could not be filled even by the university. In aiming to reproduce Greece and Rome in the midst of modern Christian civilization, Sturm's scheme involves a vast anachronism.

"And what a strange mistake," exclaims Paroz, "to

wish to confine the scientific culture of a nation in the forms of a foreign language! In order to succeed, it would have been necessary at the start to overcome the resistance of a young, vigorous, popular, national language. But such a result was neither possible nor desirable. The future belonged to the mother-tongue; and true modern culture, the culture suited to modern needs and to the genius of the people, was not found in the Latin gymnasia of the sixteenth and seventeenth centuries—it lay germinally in the religious work of the period; that is, in the translation of the Bible, in hymns, sermons, and catechisms, and in those poor popular schools in which the mother-tongue was spoken. We are astonished to-day that Sturm did not make the German language a branch of instruction, and that he even despised French and German, although he somewhere acknowledges that Luther and Philippe de Comines have written as well as the most celebrated of the ancients."

Sturm's influence extended to England, and thence to America. Says a recent English writer: "No one who is acquainted with the education given at our principal classical schools, Eton, Winchester, and Westminster, forty years ago, can fail to see that their curriculum was framed in a great degree on Sturm's model. During our own generation the subjects of school-teaching have been largely multiplied, and we can afford to look down on the humanistic scheme as narrow and incomplete; but it had at least this merit, that it was a well-considered plan, harmonious in its arrangement, with its parts well fitting into one another. The master of each class knew precisely what the boys confided to him were

expected to learn. When they proceeded to the university, the preliminary instruction which they took with them had been well defined."

(B.) THE UNIVERSITIES.

The universities were affected most, perhaps, by the theological influences of the period. These institutions were established in considerable numbers for the promulgation of particular types of theology. The universities established between 1550 and 1700, with their ecclesiastical relations, are as follows: Strasburg, Lutheran, 1621; Geneva, Reformed, 1558; Jena, Lutheran, 1557; Dillingen, Catholic, 1554; Helmstädt, Lutheran, 1576; Altorf, Lutheran, 1575; Herborn, Reformed, 1654; Grätz, Catholic, 1586; Paderborn, Catholic, 1592; Giesen, Lutheran, 1607; Rinteln, Lutheran, 1619; Salzbürg, Catholic, 1622; Münster, Catholic, 1631; Osnabrück, Catholic, 1632; Bamberg, Catholic, 1648; Duisburg, Reformed, 1655; Kiel, Lutheran, 1665; Innspruck, Catholic, 1670; Halle, Lutheran, 1694. Of these, Helmstädt, Altorf, Rinteln, and Duisburg were subsequently dissolved.

No important changes were made in the organization of the universities. The course of instruction, which continued in the hands of the four faculties of philosophy, theology, law, and medicine, remained narrow. History and the modern tongues were entirely neglected; mathematics received but little attention; physics, astronomy, and natural history—the only natural sciences recognized—were taught out of Aristotle, Ptolemy, and Pliny; and medicine out of Hippocrates and Galen. Even Greek was accorded only an inferior position. In

the universities, as in the gymnasia, Latin was the chief subject of study. "Thus was the circle of studies," says Raumer, "at the schools as at the universities extremely restricted, as compared with the range of subjects in our time. It is clear, as I have repeatedly remarked, that all the time and strength of the youth were forcibly concentrated upon the learning and exercising of Latin. Grammar was studied for years in order to learn to speak and write Latin correctly; dialectic, in order to use it logically; and rhetoric, in order to handle it oratorically. Facility was sought by means of debate, declamation, and representations of Terence. The classics were read in order to collect words and phrases from them for speaking and writing, without particular concern for the thought."

The state of morals at the universities of the sixteenth and seventeenth centuries was very low. Idleness, drunkenness, disorder, and licentiousness prevailed in an unparalleled degree. The practice of hazing was universal, and new students were subjected to shocking indignities. The following graphic description, contained in a rescript of Duke Albrecht of Saxony to the University of Jena in 1624, would apply equally well to any other university of the time: "Customs before unheard of," he says, "inexcusable, unreasonable, and wholly barbarian, have come into existence. When any person, either of high or low rank, goes to any of our universities for the sake of pursuing his studies, he is called by the insulting names of pennal, fox, tape-worm, and the like, and treated as such; and insulted, abused, derided, and hooted at, until, against his will, and to the great injury and damage of himself and his parents, he

has prepared, given, and paid for a stately and expensive entertainment. And at this there happen, without any fear of God or man, innumerable disorders and excesses, blasphemies, breaking up of stoves, doors, and windows, throwing about of books and drinking-vessels, looseness of words and actions, and in eating and drinking, dangerous wounds, and other ill deeds; shames, scandals, and all manner of vicious and godless actions, even sometimes extending to murder or fatal injuries. And these doings are frequently not confined to one such feast, but are continued for days together at meals, at lectures, privately and publicly, even in the public streets, by all manner of misdemeanors in sitting, standing, or going, such as outrageous howls, breaking into houses and windows, and the like; so that by such immoral, wild, and vicious courses, not only do our universities perceptibly lose in good reputation, but many parents in distant places either determine not to send their children at all to this university—founded with such great expense by our honored ancestors, now resting in peace with God, and thus far maintained by ourselves—or to take them away again.”

The custom of hazing was broken up in Germany about 1660, after which time the moral condition of the universities showed a marked improvement.

(C.) THE JESUITS.

Within the Catholic Church education was promoted chiefly by the Jesuits. This order, established by Ignatius Loyola, found its special mission in combating the Reformation. As the most effective means of arresting the progress of Protestantism, it aimed at controlling

education, particularly among the wealthy and the noble. In rivalry with the schools of Protestant countries, it developed an immense educational activity, and earned for its schools a great reputation. They were praised and patronized even by Protestants. Bacon says: "Take example by the schools of the Jesuits, for better do not exist. When I look at the diligence and activity of the Jesuits, both in imparting knowledge and in molding the heart, I bethink me of the exclamation of Agesilaus concerning Pharnabazas: 'Since thou art so noble, I would thou wert on our side!'"

The organization was perhaps the most compact that has ever existed. Only men of marked ability were admitted to it, and on entering they gave up their personality in complete consecration to the interests of the order. The will of the general was supreme, and from his headquarters in Rome he could direct the movements of the society with absolute precision and certainty. A more formidable foe has never faced Protestantism. The following are some of the principles of the organization, as given by Pascal: 1. The end sanctifies the means. 2. Mental reservations are allowable in making promises and in taking oaths. 3. Philosophically, every transgression against a divine commandment is sin—theologically, only such violations as are perpetrated with full consciousness of the wrong, and a set purpose to break God's law.

From the time of its organization the Jesuit society worked with indomitable energy. Its principles and methods were covered up by an attractive religious zeal. Not only Catholic but also a portion of Protestant Europe aided its growth, and in the course of a

few years the order arrived at immense power. More than any other agency it stayed the progress of the Reformation, and it even succeeded in winning back territory already conquered by Protestantism. Although employing the pulpit and the confessional, it worked chiefly through its schools, of which it established and controlled large numbers. Education in all Catholic countries gradually passed into its hands. In 1710 the order had no less than six hundred and twelve colleges, one hundred and fifty-seven normal schools, twenty-four universities, and two hundred missions. These institutions had a large patronage. In 1675 the College of Clermont numbered three thousand students. "The Jesuits," says James Freeman Clarke, "spread over Europe in a few years, taking possession of the pulpits, the schools, and the confessionals. They were most accomplished and popular preachers, and filled anew the deserted churches. They supplanted other priests in the care of consciences, and their schools were filled with the children of all classes, for they taught not only gratuitously but well."

But the order could not continue in its course of brilliant success. In spite of the ability, zeal, and self-sacrifice of its members, it excited opposition by its ambitious schemes and increasing power. After having been banished from nearly every country of Europe, the order was finally abolished by Pope Clement XIV., in 1773. Though since revived and possessed of former energy and zeal, it is not so powerful.

With this rapid sketch before us, we can study the Jesuit system of education with greater interest and profit. This system, based on a draft prepared by

Loyola himself, was elaborately set forth in a "plan of studies" prepared in 1588; and, though it underwent some slight modification in 1832 to accommodate it, in some degree, to modern needs, it has remained without essential change. Whatever its defects as a system of general education, it was admirably suited to Jesuit purposes, and in some particulars it embodied valuable principles.

Every member of the order became a competent and practical teacher. He received a thorough course in the ancient classics, philosophy, and theology. During the progress of his later studies he was required to teach. In the Jesuit schools there was a lower and a higher course of instruction. The lower course, which closely corresponds to Sturm's, occupied six years, the classes being arranged as follows:

1. Rudiments of Latin grammar.
2. Middle grammar class.
3. Latin syntax.
4. The humanities.
5. Rhetoric (two years).

Arithmetic, history, and natural science occupied a very subordinate place. As the language of the Roman Church, Latin was the principal subject of study. Great thoroughness was aimed at. "A knowledge of syntax," says the "plan of studies," above referred to, "is not the end of grammar; pupils ought to learn Latin as a living language; they ought to be able to read, speak, and write it." Ancient literature was esteemed, not for its thought, but for its style. "The study of classic authors," says the "plan," "can have for us only a secondary end, namely, to form the style; we wish nothing more. Style will be formed essentially after Cicero.

Pupils, both in speaking and in writing, will make use of classic phrases." Greek was cultivated with success.

The Jesuits were hostile to the mother-tongue; and, distrusting the influence of its associations, they assiduously endeavored to supplant it. Says the "plan of studies": "All use of the mother-tongue should be forbidden. Those who make use of it ought to bear a mark of humiliation, to which a light punishment also should be added, unless the pupil succeed the same day in throwing the double load upon a comrade whom he has detected, in school or upon the street, committing the same fault."

The religious element of education was strongly emphasized. This is shown by the following extract: "Religion," says the "plan of studies," "ought to be the base and summit, the center and soul of all study, of all education. It is necessary first of all that the young man make progress in the knowledge of his Creator and of his Saviour, and that he increase in morality as he develops in intelligence. The teacher should serve as example to his pupils; he will fear to give them offense, and will pray for them. He will recommend them with great confidence to the Holy Virgin and to the patron saints of youth, to Saint Joseph, Saint Catherine, etc. That humility will be cultivated which seeks, not the glory of the world, but of God. What touches on vice will be held vile and bad. The will of every one will identify itself with the will of the superior,* which is to be respected and followed as the will of Christ. The teacher will see to it that the pupils read, recite, and offer mentally certain prayers. . . . The

* The general of the order.

pupil that neglects his religious duties will be punished; he will be compelled to pass some time in prayer, or on festival days to attend a second mass. Pupils that distinguish themselves by their devotion should be publicly praised."

The studies were few in number, and carefully adjusted to the pupil's ability. In all cases short lessons and thorough work was the rule. The memory was attentively cultivated; and, to this end, reviews were made at the close of each week, month, and term. To gain influence with the higher classes, from which they desired to draw their chief patronage, the Jesuits cultivated elegant manners, and encouraged physical training by means of gymnastics. A strict watch, which often assumed the form of hateful espionage, was kept over the pupil. Corporal punishment, resorted to only in extreme cases, was administered, not by a member of the order, but by a corrector kept for that purpose. The "plan of studies" explains this precaution: "Pupils," it says, "that in view of their age or exterior appear weak, insignificant, and perhaps contemptible, will soon be youths and men, who may attain to position, fortune, or power, so that it is possible we may be obliged to seek their favor, or to depend upon their will; this is why it is important to consider well the manner of treating and punishing them."

The Jesuits made much of emulation, and in their eager desire to promote it they adopted means that could not fail to excite jealousy and envy. Says the "plan of studies": "He who knows how to excite emulation has found the most powerful auxiliary in his teaching. Let the teacher, then, highly appreciate this valuable aid,

and let him study to make the wisest use of it. Emulation awakens and develops all the powers of man. In order to maintain emulation, it will be necessary that each pupil have a rival to control his conduct and criticise him ; also magistrates, quæstors, censors, and decurions should be appointed among the students. Nothing will be held more honorable than to outstrip a fellow-student, and nothing more dishonorable than to be outstripped. Prizes will be distributed to the best pupils with the greatest possible solemnity. Out of school the place of honor will everywhere be given to the most distinguished pupils."

The higher course of instruction usually extended through six years. Two years were devoted to philosophy, including psychology, logic, ethics, and mathematics. Aristotle furnished the leading text-books. Four years were given to theology, including holy Scripture, Hebrew, and the writings of the scholastics.

It only remains to sum up in a word the results of this investigation. The Jesuit system of education, based not upon a study of man, but upon the interests of the order, was necessarily narrow. It sought showy results with which to dazzle the world. A well-rounded development was nothing. The principle of authority, suppressing all freedom and independence of thought, prevailed from beginning to end. Religious pride and intolerance were fostered. While our baser feelings were highly stimulated, the nobler side of our nature was wholly neglected. Love of country, fidelity to friends, nobleness of character, enthusiasm for beautiful ideals, were insidiously suppressed. For the rest, we adopt the language of Quick : " The Jesuits did not aim at developing

all the faculties of their pupils, but merely the receptive and reproductive faculties. When the young man had acquired a thorough mastery of the Latin language for all purposes; when he was well versed in the theological and philosophical opinions of his preceptors; when he was skillful in dispute, and could make a brilliant display from the resources of a well-stored memory, he had reached the highest points to which the Jesuits sought to lead him. Originality and independence of mind, love of truth for its own sake, the power of reflecting, and of forming correct judgments, were not merely neglected, they were suppressed in the Jesuits' system. But in what they attempted they were eminently successful, and their success went a long way toward securing their popularity."

5. REACTION AGAINST ABSTRACT THEOLOGICAL EDUCATION.

Hitherto we have considered the darker aspects of the seventeenth century, but there is a brighter side which is now to claim our attention. By the side of narrow theological and humanistic tendencies, there was developed a liberal progressive spirit, in which lay the hope of the future. It freed itself from traditional opinions, and pushed its investigations everywhere in search of new truth. In England Bacon set forth his inductive method, by which he gave an immense impulse to the study of Nature; in France Descartes laid a solid foundation for intellectual science; and in Germany Leibnitz "quickly reached the bound and farthest limit of human wisdom, to overleap that line and push

onward into regions hitherto unexplored, and dwell among yet undiscovered truths." Great progress was made in the natural sciences. Galileo invented the telescope, and discovered the moons of Jupiter. Newton discovered the law of gravitation, and explained the theory of colors. Harvey found out the circulation of the blood. Torricelli invented the barometer, Guericke the air-pump, Napier logarithms. Pascal ascertained that the air has weight, and Roemer measured the velocity of light. Kepler announced the laws of planetary motion. Louis XIV. established the French Academy of Sciences, and Charles II. the Royal Society of England.

The progress in literature was no less marked. Upon two European nations the golden age of letters shed its luster. In England, Bacon, Shakespeare, and Milton wrote; in France, Corneille, Molière, and Racine. "No other country," says Macaulay, "could produce a tragic poet equal to Racine, a comic poet equal to Molière, a trifle so agreeable as La Fontaine, a rhetorician so skillful as Bossuet. Besides these, who were easily first, there were Pascal, whose 'Provincial Letters' created a standard for French prose; Fénelon, whose 'Telemachus' still retains its wonderful popularity; Boileau, who has been styled the Horace of France; Madame de Sévigné, whose graceful letters are models of epistolary style; and Massillon, who pronounced over the grave of Louis XIV. a eulogy ending with the sublime words, 'God alone is great!'"

All over Europe the human mind, gradually coming to a sense of its native dignity and power, was emancipating itself from traditional and ecclesiastical authority.

Reason was asserting its rights. In the presence of this independent and investigating spirit, the imperfections of the existing education—its one-sidedness, its narrow and unpractical course of study, its unworthy aims, its mechanical methods and cruel discipline—could not escape attention. Prophetic voices were raised against it, its leading defects were noted, and many of the principles and methods now employed in our best schools were given to the world. Says Karl Schmidt: "Books, words, had been the subjects of instruction during the period of abstract theological education. The knowledge of things was wanting. Instead of the things themselves, words about the things were taught—and these, taken from the books of the 'ancients' about stars, the forces of Nature, stones, plants, animals—astronomy without observations, anatomy without dissection of the human body, physics without experiments, etc. Then appeared in the most different countries of Europe an intellectual league of men who made it their work to turn away from dead words to living nature, and from mechanical to organic instruction. They were indeed only preachers in the wilderness, but they were the pioneers of a new age." These now come before us.

(A.) MONTAIGNE.

Montaigne, a celebrated writer of France, was born in 1533. Great care was taken with his education. At an early age he was intrusted to a German tutor who did not understand French, and who employed Latin in communicating with his pupil. As a result, he was able at the age of six years to speak Latin. At thirteen he completed his studies at the College of Guienne, at Bor-

deaux, and subsequently studied law. At twenty he was elected a member of the Parliament of Bordeaux, and was afterward chosen mayor of the city. But possessed of ample means, and having no political ambition, he withdrew to his estate to live in philosophic retirement. It was here that he produced his celebrated "Essays"—tracts on all sorts of subjects caught up apparently by chance, and written in an easy colloquial style.

In his essays, which abound in unpretentious wisdom, Montaigne repeatedly touches on education. His views, which are far in advance of his age, exhibit a strong reactionary tendency. He points out with singular clearness and force many of the defects of the prevailing education. He grasped the true idea of education. "It is not a soul," he says, "it is not a body that we are training up, but a man, and we ought not to divide him."

In reference to the study of languages, he says: "Fine speaking is a very good and commendable quality, but not so excellent or so necessary as some would make it; and I am scandalized that our whole life should be spent in nothing else. I would first understand my own language, and that of my neighbor with whom most of my business and conversation lies. No doubt Greek and Latin are very great ornaments, and of very great use; but we may buy them too dear."

He does not set a high estimate upon the knowledge which the student acquires under the humanistic scheme. "Do but observe him," he says, "when he comes back from school, after fifteen or sixteen years that he has been there, there is nothing so awkward and maladroit, so unfit for company or employment; and all that you

shall find he has got is, that his Latin and Greek have only made him a greater and more conceited coxcomb than when he went from home. He should bring his soul replete with good literature, and he brings it only swelled and puffed up with vain and empty shreds and snatches of learning, and has really nothing more in him than he had before."

Montaigne strongly inveighs against the mechanical methods in vogue. "It is the custom of schoolmasters," he says, "to be eternally thundering in their pupils' ears as if they were pouring into a funnel, while the pupils' business is only to repeat what their masters have said. Now, I would have a tutor correct this error, and that at the very first; he should, according to the capacity he has to deal with, put it to the test, permitting his pupil himself to taste and relish things, and of himself to choose and discern them, the tutor sometimes opening the way to him, and sometimes making him break the ice himself; that is, I would not have the tutor alone to invent and speak, but that he should also hear his pupils speak."

Of the cramming process then current, particularly among the Jesuits, Montaigne says: "Too much learning stifles the soul, just as plants are stifled by too much moisture, and lamps by too much oil. Our pedants plunder knowledge from books and carry it on the tip of their lips, just as birds carry seeds to feed their young. The care and expense our parents are at in our education point at nothing but to furnish our heads with knowledge; but not a word of judgment or virtue. We toil and labor only to stuff the memory, but leave the conscience and understanding unfurnished and void."

In reference to discipline, Montaigne says: "Educa-

tion ought to be carried on with a severe sweetness quite contrary to the practice of our pedants, who, instead of tempting and alluring children to letters by apt and gentle ways, do in truth present nothing before them but rods and ferules, horror and cruelty. Away with this violence! away with this compulsion! than which I certainly believe nothing more dulls and degenerates a well-descended nature. If you would have him apprehend shame and chastisement, do not harden him to them."

Interesting and valuable extracts might be indefinitely multiplied, but one more, relating to the chief subject of study, must suffice. "This great world," says Montaigne, "is the mirror wherein we are to behold ourselves, to be able to know ourselves as we ought to do. In short, I would have this to be the book my young gentleman should study with the most attention; for so many humors, so many sects, so many judgments, opinions, laws, and customs, teach us to judge right of our own, and inform our understandings to discover their imperfection and natural infirmity, which is no trivial speculation. So many mutations of states and kingdoms, and so many turns and revolutions of public fortune, will make us wise enough to make no great wonder of our own. So many great names, so many famous victories and conquests drowned and swallowed in oblivion, render our hopes ridiculous of eternizing our names by the taking of half a score of light-horse, or a paltry turret, which only derives its memory from its ruin. The pride and arrogance of so many foreign pomps and ceremonies, the tumorous majesty of so many courts and grandeurs, accustom and fortify our sight

without astonishment to behold and endure the luster of our own. So many millions of men buried before us, encourage us not to fear to go seek so good company in the other world."

(B.) BACON.

Francis Bacon, who has done more perhaps for the advancement of knowledge than any other man of modern times, was born in London in 1560. He was of delicate constitution, but endued with remarkable intellectual power. From childhood he manifested a philosophical turn of mind, and it is related of him that he stole away from his playmates to indulge his thought and spirit of investigation. Queen Elizabeth, delighted with his youthful precocity, playfully called him her young Lord Keeper. At thirteen he was matriculated at the University of Cambridge, and it was not long till his keen penetration detected the faults belonging to the higher education of the time. He found himself, to use his own language, "amid men of sharp and strong wits, and abundance of leisure; and small variety of reading, their wits being shut up in the cells of a few authors, chiefly Aristotle, their dictator, as their persons were shut up in the cells of monasteries and colleges; and who, knowing little history, either of nature or time, did, out of no great quantity of matter, and infinite agitation of wit, spin cobwebs of learning, admirable for the fineness of thread and work, but of no substance or profit."

He remained at the university three years. After spending some time in Paris, where he made the acquaintance of many distinguished persons, he returned

to England, and devoted himself to the study of law, in which he speedily made profound attainments. Owing to the opposition of his uncle, Cecil, who held the position of prime minister, he was kept for a time from any post of prominence and emolument. In 1590 he was made counsel-extraordinary to the queen—a position of more honor than profit. Two years later he entered Parliament as member from Middlesex. His legal and political functions did not wholly absorb the energies of his mind, and in 1597 he published a volume of “Essays,” which alone would have sufficed to give him an honorable place in English literature.

After the accession of James I., in 1603, Bacon rose rapidly in position and honor. That year he was elevated to the order of knighthood, and in the following year he was appointed salaried counsel to the king—a mark of favor almost without precedent. In 1613 he was advanced to the office of attorney-general. In 1617 he was created Lord Keeper of the Great Seal of England—a dignity of which he was proud. The following year he was made Lord High Chancellor, the summit of his ambition and political elevation.

In these positions, Bacon’s conduct was not above reproach. He truckled to the king; he was guilty of gross ingratitude to Essex, one of his greatest benefactors; and, worst of all, he was convicted on his own confession of accepting bribes. He was condemned to pay an enormous fine, and to be confined in the Tower during the royal pleasure; but these penalties, after he was imprisoned two days, were remitted by the king, who was not free himself from implication in the crimes of his chancellor. The rest of Bacon’s days were spent

in poverty, disgrace, and repentance. He died in 1626, about five years after his fall.

The numerous works of Bacon, written in the leisure moments snatched from official duties, established his reputation throughout Europe as the leading English philosopher. He has repeatedly touched upon education in his writings, and everywhere with the hand of a master. He holds a prominent place in the line of educational reformers. "This significance," says Raumer, "Bacon receives as the first to say to the learned men who lived and toiled in the languages and writings of antiquity, and who were mostly only echoes of the old Greeks and Romans, yea, who knew nothing better than to be such: 'There is also a present; only open your eyes to recognize its splendor. Turn away from the shallow springs of traditional natural science, and draw from the unfathomable and ever freshly flowing fountain of creation. Live in Nature with active senses; ponder it in your thoughts, and learn to comprehend it, for thus you will be able also to control it. Power increases with knowledge.'"

Bacon's first great philosophical work, published in 1605, was the "Advancement of Learning." It was the aim of this work to take a complete survey of the field of knowledge, for the purpose of indicating what departments of learning had received due attention, and what subjects yet needed cultivation. To use his own words: "I have made, as it were, a small globe of the intellectual world, as truly and faithfully as I could discover; with a note and description of those parts which seem to me not constantly occupate, or not well converted by the labor of man."

In this work he was naturally led to treat of various aspects of education. He regarded it as a defect in the universities of the time that they were devoted to professional studies rather than to general learning. A liberal culture is insisted on as the basis of a professional career. "If men judge," he says, "that learning should be referred to action, they judge well; but in this they fall into the error described in the ancient fable, in which the other parts of the body did suppose the stomach had been idle, because it neither performed the office of motion, as the limbs do, nor of sense, as the head doth; but yet, notwithstanding, it is the stomach that digesteth and distributeth to all the rest: so, if any man think philosophy and universality to be idle studies, he doth not consider that all professions are from thence served and supplied. And this I take to be a great cause that hath hindered the progression of learning, because these fundamental knowledges have been studied but in passage. For, if you will have a tree bear more fruit than it hath used to do, it is not anything you can do to the boughs, but it is the stirring of the earth and putting new mould about the roots that must work it."

Bacon held learning to be conducive to religious faith. "It is an assured truth," he says, "and a conclusion of experience, that a little or superficial knowledge of philosophy may incline the mind of man to atheism, but a further proceeding therein doth bring the mind back again to religion; for, in the entrance of philosophy, when the second causes, which are next unto the senses, do offer themselves unto the mind of man, if it dwell and stay there, it may induce some oblivion of the highest cause; but when a man passeth on farther, and seeth

the dependence of causes and the works of Providence, then, according to the allegory of the poets, he will easily believe that the highest link of Nature's chain must needs be tied to the foot of Jupiter's chair."

Learning should inure to the good of mankind. "Men have entered into a desire of learning and knowledge," Bacon says, "sometimes upon a natural curiosity and inquisitive appetite, sometimes to entertain their minds with variety and delight, sometimes for ornament and reputation, and sometimes to enable them to victory of wit and contradiction—and, most times, for lucre and profession; and seldom sincerely to give a true account of their gift of reason, *to the benefit and use of man*: as if there were sought in knowledge a couch, whereupon to rest a searching and restless spirit, or a terrace for a wandering and variable mind to walk up and down with a fair prospect; or a tower of state, for a proud mind to raise itself upon; or a fort or commanding ground, for strife and contention; or a shop, for profit or sale; and not a rich storehouse, *for the glory of the Creator and the relief of man's estate*."

Bacon censured *a priori* or speculative philosophy which seeks to deduce all truth from the inner resources of the mind. "The wit and mind of man," he says, "if it work upon matter, which is the contemplation of the creatures of God, worketh according to the stuff, and is limited thereby; but, if it work upon itself, as the spider worketh his web, then it is endless, and brings forth indeed cobwebs of learning, admirable for the fineness of thread and work, but of no substance or profit."

While not indifferent to graces of style, Bacon criticised the excessive humanistic tendency of his time.

He regarded this tendency as operative in bringing learning into discredit. "How is it possible," he asks, "but this should have an operation to discredit learning, even with vulgar capacities, when they see learned men's works like the first letter of a patent or limned book, which, though it hath large flourishes, yet it is but a letter? It seems to me that Pygmalion's frenzy is a good emblem or portraiture of this vanity, for words are but the images of matter; and, except they have life of reason and invention, to fall in love with them is all one as to fall in love with a picture." *

The *Novum Organum*, part of a vast, unfinished work called the *Instauratio Magna*, was published in 1620, and contains the principles of the Baconian or inductive philosophy. It is written in the form of aphorisms, the first of which are here given as indicating the character of the whole work:

"I. Man, the minister and interpreter of Nature, can act and understand in as far as he has, either in fact or in thought, observed the order of Nature; more he can neither know nor do.

"II. The real cause and root of almost all the evils in science is this, *that, falsely magnifying and extolling the powers of the mind*, we seek not its real helps.

"III. There are two ways of searching after and discovering truth: the one, from sense and particulars, rises directly to the most general axioms, and resting upon these principles, and their unshaken truth, finds out intermediate axioms, and this is the method in use; but the other raises axioms from sense and particulars

* Pygmalion, a sculptor of the island of Cyprus, cherished a settled aversion to women, but fell in love with an ivory statue.

by a continued and gradual ascent, till at last it arrives at the most general axioms, which is the true way, but hitherto untried."

Investigation, experiment, verification, these are characteristic features of the Baconian philosophy. It urges men to quit barren, transcendental speculation for fruit-bearing research in Nature. It is intensely practical; it has made Bacon the father of experimental philosophy; it has been potent in turning modern thought into new channels, and has contributed largely to the scientific and material progress of the present. Bacon's significance in philosophy, and, it might be added, also in education, has been admirably stated by Lewes: "It was Bacon's constant endeavor, as it has been the cause of his enduring fame, to teach men the real object of science, and the scope of their faculties, and to furnish them with a proper method whereon these faculties might be successfully employed. He thus not only stands out clearly in history as the exponent of the long-agitated antagonism to all the ancient and scholastic thinkers, but also as the exponent of the rapidly increasing tendency toward positive science. He is essentially modern. All his predecessors, even in their boldest attacks upon ancient philosophy, were themselves closely allied to the spirit of that which they opposed. Ramus is the child of Aristotle, though he raised his hand against his father; but Bacon was modern in culture, in object, and in method."

His thoroughly modern spirit is shown in the following remarkable passage, the truth of which, after a lapse of two hundred and fifty years, is rapidly gaining recognition, and changing the character of our educa-

tion: "The opinion," he says, "which men cherish of antiquity is altogether idle, and scarcely accords with the term. For the old and increasing years of the world should in reality be considered antiquity, and this is rather the character of our own times than of the less advanced age of the world in those of the ancients. For the latter, with respect to ourselves, are ancient and elder; with respect to the world, modern and younger. And, as we expect a greater knowledge of human affairs and more mature judgment from an old man than from a youth, on account of his experience, and the variety and number of things he has seen, heard, and meditated upon, so we have reason to expect much greater things of our own age (if it knew but its strength and would essay and exert it) than from antiquity, since the world has grown older, and its stock has been increased and accumulated with an infinite number of experiments and observations. We must also take into our consideration that many objects in Nature fit to throw light upon philosophy have been exposed to our view and discovered by means of long voyages and travels, in which our times have abounded. It would, indeed, be dishonorable to mankind if the regions of the material globe, the earth, the sea, and stars, should be so prodigiously developed and illustrated in our age, and yet the boundaries of the intellectual globe should be confined to the narrow discoveries of the ancients." This extract is one of the aphorisms of the *Novum Organum*.

We must content ourselves with but one more passage, though Bacon's works are a rich mine of educational wisdom. It is a criticism upon the principle of authority which reigned in the schools of the time, to

the repression of free and fruitful inquiry. "In the universities," he says, "all things are found opposite to the advancement of the sciences; for the readings and exercises are here so managed that it can not easily come into any one's mind to think of things out of the common road: or if, here and there, one should venture to use a liberty of judging, he can only impose the task upon himself without obtaining assistance from his fellows; and, if he could dispense with this, he will still find his industry and resolution a great hindrance to his fortune. For the studies of men in such places are confined, and pinned down to the writings of certain authors; from which, if any man happens to differ, he is presently reprehended as a disturber and innovator."

Bacon had an unswerving faith in the power of truth, and he confidently looked forward to a time when his philosophical and educational reforms, replete with blessings to the world, would be approved and adopted. The following prediction, whose fulfillment has established the character and mission of the prophet, is sublime: "I have held up a light in the obscurity of philosophy," he says, "which will be seen centuries after I am dead. It will be seen amid the erection of temples, tombs, palaces, theatres, bridges, making noble roads, cutting canals, granting multitude of charters and liberties for comfort of decayed companies and corporations; the foundation of colleges and lectures for learning and the education of youth; foundations and institutions of orders and fraternities for nobility, enterprise, and obedience; but, above all, the establishing good laws for the regulation of the kingdom, and as an example to the world."

(C.) MILTON.

John Milton, the sublimest poet of all times, was born in London, in 1608. The highly eulogistic lines of Dryden hardly surpass the truth :

Three poets, in three distant ages born,
Greece, Italy, and England did adorn.
The first in loftiness of thought surpassed ;
The next in majesty ; in both the last.
The force of Nature could no further go :
To make a third, she joined the other two.

His father, as Milton himself tells us, was a man of the highest integrity, and his mother a woman of most virtuous character, especially distinguished for her neighborhood charities. After a good preliminary training, Milton was sent to Cambridge, where he made diligent use of his time. In the following interesting passage, he tells us something of his studies, and the dawning consciousness of his greatness : "I must say that, after I had, for my first years, by the ceaseless diligence and care of my father (whom God recompense !), been exercised to the tongues, and some science as my age would suffer, by sundry masters and teachers, both at home and at the schools, it was found that, whether aught was imposed on me by them that had the overlooking, or be-taken to of mine own choice, in English, or other tongue, prosing or versing, but chiefly the latter, the style, by certain vital signs it had, was likely to live. But, much latelier, in the private academies of Italy, whither I was favored to resort, perceiving that some trifles which I had composed at twenty, or thereabout, . . . met with acceptance above what was looked for ; and other things,

which I had shifted (in scarcity of books and conveniences) to patch up among them, were received with written encomiums, which the Italian is not forward to bestow on men on this side of the Alps—I began thus to assent both to them, and divers of my friends at home, and not less to an inward prompting, which now grew daily upon me, that, by labor and intense study (which I take to be my portion in this life), I might, perhaps, leave something so written to after-times as they should not willingly let die.”

In one of his controversial tracts, replying to certain calumniations, he depicts his personal habits as follows: “Those morning haunts are where they should be—at home; not sleeping or concocting the surfeits of an irregular feast, but up and stirring in winter, often ere the sound of any bell awakens men to labor or devotion; in summer, as oft with the bird that first rouses, or not much tardier, to read good authors, or cause them to be read, till the attention be weary, or the memory have its full fraught. Then, with useful and generous labors, preserving the body’s health and hardiness, to render lightsome, clear, and not lumpish obedience to the mind, to the cause of religion and our country’s liberty, when it shall require firm hearts in sound bodies, to stand and cover their stations, rather than see the ruin of our Protestantism, and the enforcement of a slavish life.”

It would carry us beyond our limits to follow the career of Milton through the troublous times of the Commonwealth, and the dangers and sufferings of the Restoration; to speak of his embittered controversies and domestic trials; and to portray him, old and blind, in the elaboration of “Paradise Lost,” the cherished

thought of a lifetime. Of this last period, in a poem on his blindness, Miss Floyd represents him as saying, in words of great power and beauty :

I am old and blind—
Men point at me as smitten by God's frown,
Afflicted and deserted of my kind,
Yet I am not cast down.

I am weak, yet strong ;
I murmur not that I no longer see ;
Poor, old, and helpless, I the more belong,
Father Supreme ! to thee.

Oh ! I seem to stand
Trembling, where foot of mortal ne'er hath been,
Wrapped in the radiance of thy sinless land,
Which eye hath never seen.

Visions come and go ;
Shapes of resplendent beauty round me throng ;
From angel lips I seem to hear the flow
Of soft and holy song.

Milton belongs to the educational reformers. In a letter to Samuel Hartlib, he has presented his views upon education in a brief but comprehensive form ; or, to use his own language, he has "set down in writing . . . that voluntary idea, which hath long in silence presented itself to me, of a better education, in extent and comprehension far more large, and yet of time far shorter and of attainment far more certain, than hath been yet in practice."

His definition of a liberal education is contained in the following sentence : "I call, therefore, a complete

and generous education that which fits a man to perform justly, skillfully, and magnanimously all the offices both private and public, of peace and war."

"The end, then, of learning is," he says, "to repair the ruins of our first parents by regaining to know God aright, and out of that knowledge to love him, to imitate him, to be like him, as we may the nearest by possessing our souls of true virtue, which being united to the heavenly grace of faith, makes up the highest perfection. But because our understanding can not in this body found itself but on sensible things, nor arrive so clearly to the knowledge of God and things invisible, as by orderly conning over the visible and inferior creature, the same method is necessarily to be followed in all discreet teaching. And seeing every nation affords not experience and tradition enough for all kinds of learning, therefore we are chiefly taught the languages of those people who have at any time been most industrious after wisdom; so that language is but the instrument conveying to us things useful to be known. And though a linguist should pride himself to have all the tongues that Babel cleft the world into, yet if he have not studied the solid things in them, as well as the words and lexicons, he were nothing so much to be esteemed a learned man as any yeoman or tradesman competently wise in his mother dialect only." In the latter part of this admirable passage, Milton emphasizes substantial learning as contrasted with the current, well-nigh empty study of words, which he elsewhere characterizes as "pure trifling at grammar and sophistry."

In the same connection, he protests against the imposition of tasks beyond the strength and years of the

pupil. "We do amiss," he says, "to spend seven or eight years merely in scraping together so much miserable Latin and Greek as might be learned otherwise easily and delightfully in one year. And that which casts our proficiency therein so much behind is our time lost partly in too oft idle vacancies given both to schools and universities; partly in a preposterous exaction, forcing the empty wits of children to compose themes, verses, and orations, which are the acts of ripest judgment, and the final work of a head filled by long reading and observing with elegant maxims and copious invention. These are not matters to be wrung from poor striplings, like blood out of the nose, or the plucking of untimely fruit; besides all the ill habit which they get of wretched barbarizing against the Latin and Greek idiom, with their untutored Anglicisms, odious to be read, yet not to be avoided without a well-continued and judicious conversing among pure authors, digested, which they scarce taste."

In the following extract Milton arraigns the methods and studies pursued at the universities, and shows the unsatisfactory results for the cause of learning and the duties of active life: "And for the usual method of teaching arts, I deem it to be an old error of universities, not yet well recovered from the scholastic grossness of barbarous ages, that, instead of beginning with arts most easy (and those be such as are most obvious to the sense), they present their young, unmatriculated novices, at first coming with the most intellective abstractions of logic and metaphysics; so that they having but newly left those grammatic flats and shallows, where they stuck unreasonably long to learn a few words with

lamentable construction, and now on the sudden transported under another climate, to be tossed and turmoiled with their unballasted wits in fathomless and unquiet deeps of controversy, do for the most part grow into hatred and contempt of learning, mocked and deluded all this while with ragged notions and babblements, while they expected worthy and delightful knowledge; till poverty or youthful years call them importunately their several ways, and hasten them, with the sway of friends, either to an ambitious and mercenary, or ignorantly zealous divinity: some allured to the trade of law, grounding their purposes not on the prudent and heavenly contemplation of justice and equity, which was never taught them, but on the promising and pleasing thoughts of litigious terms, fat contentions, and flowing fees; others betake them to state affairs, with souls so unprincipled in virtue and true generous breeding, that flattery, and court-shifts, and tyrannous aphorisms, appear to them the highest points of wisdom—instilling their barren hearts with a conscientious slavery, if, as I rather think, it be not feigned; others, lastly, of a more delicious and airy spirit, retire themselves, knowing no better, to the enjoyments of ease and luxury, living out their days in feast and jollity, which indeed is the wisest and safest course of all these, unless they were with more integrity undertaken. *And these are the errors, and these are the fruits of mis-spending our prime youth at the schools and universities, as we do, either in learning mere words, or such things chiefly as were better unlearnt.*”

Having thus pointed out the errors common in the schools, Milton continues in the following beautiful and

oft-quoted passage: "I shall detain you no longer in the demonstration of what we should not do, but straight conduct you to a hill-side, where I will point you out the right path of a virtuous and noble education; laborious, indeed, at the first ascent, but else so smooth, so green, so full of goodly prospect and melodious sounds on every side, that the harp of Orpheus was not more charming."

We will not follow Milton through the vast scheme of studies which he proposed—a scheme that included nearly the whole range of literature and science. "His proposals indeed," says Quick, "like everything connected with him, are of heroic mold. The reader, especially if he be a schoolmaster, gasps for breath at the mere enumeration of the subjects to be learned and the books to be read." Milton himself was conscious of the vastness of his plan, and he concludes his "Tractate" to Mr. Hartlib with the remark, "I believe that this is not a bow for every man to shoot in that counts himself a teacher, but will require sinews almost equal to those which Homer gave Ulysses."

(D.) RATICH.

Ratich was not, like Montaigne, Bacon, and Milton, simply an enlightened critic; he was also a practical educator, and sought to remedy existing evils by the actual introduction of reforms. Though he erred in the application of his principles, and his efforts resulted in failure, yet he has the honor of having made substantial contributions to the permanent stock of pedagogic truth. He laid the foundations well, but failed in rearing the superstructure.

Wolfgang Ratich was born at Wilster, in Holstein, 1571. He received his classical training at the Hamburg Gymnasium, and afterward studied theology and philosophy at the University of Rostock. Compelled to give up his purpose of becoming a preacher on account of some impediment of speech, he devoted himself to the study of Hebrew, Arabic, and mathematics. He spent eight years at Amsterdam, where he elaborated his educational views, and offered his method to Prince Maurice, of Orange. The prince wished to restrict him to the teaching of Latin, but, unwilling to accept this condition, the enthusiastic reformer carried his secret to Basel and Strasburg, as well as to several courts, in search of a patron. In 1612 he addressed a memorial to the Electoral Diet, at Frankfort, in which he promised, with divine help, to show—1. How young and old might acquire, in short time, Hebrew, Greek, Latin, and other languages. 2. How a school, not only in High German, but also in other languages, might be established, in which all the arts and sciences might be taught. 3. How in the whole country a uniform language, government, and religion might be easily introduced and peaceably maintained. At the same time he attacked the current education, and insisted that the young should learn to read, write, and speak their mother-tongue correctly, before beginning the study of other languages.

The pretensions of this memorial were by no means modest, but it attracted so much attention that a commission of learned men was appointed to investigate Ratich's claims. His views were reported on favorably. Helvicus, a celebrated German scholar of the time, ex-

pressed himself in strong terms. "We are," he says, in his report, "in bondage to Latin. The Greeks and Saracens would never have done so much for posterity if they had spent their youth in acquiring a foreign tongue. We must study our own language, and then the sciences. Ratich has discovered the art of teaching according to nature. By this method languages will be quickly learned, so that we shall have time for science; and science will be learned even better still, as the natural system suits best with science, which is the study of Nature."

Finally, after repeated failures, Ratich succeeded in getting Prince Ludwig, of Anhalt-Köthen, interested in his scheme, and in 1619 received at the hands of the prince every facility for opening a model school; in return for which he made extravagant promises. A printing-house, provided with type in six different languages, was opened for the publication of text-books; and a number of teachers were set apart to receive a special drill in the new methods. It was given out that Hebrew, Greek, and Latin would be learned in less than half the time required in other parts of Germany, and besides with much less trouble.

The inhabitants of Köthen responded readily to the appeal for pupils, and a school was opened with two hundred and thirty-one boys and two hundred and two girls. It was divided into six grades. In the three lowest only the mother-tongue was to be used; in the fourth Latin was taken up, and in the sixth Greek. Besides language, arithmetic, singing, and religion were taught. The teacher of the lowest grade was to be an affable man, who, as stated in the plan, should "form

the speech of these young pupils by daily prayer, short biblical proverbs, and easy conversations ; and correct by constant practice the faults acquired out of school."

In teaching the mother-tongue, Ratich began with the letters of the alphabet, which he regarded as the simplest element of grammar. As he drew each letter slowly on the blackboard, he directed attention to its form and name ; and, in order to deepen the impression, he compared its shape with other objects (as *o* with a ring), and required the pupil to make it himself. The next step was in forming syllables and words, which were likewise to be written and pronounced. The transition to reading was made without delay, and in a novel manner. The teacher took some easy and interesting book like Genesis, and read it through before the class, going over each chapter twice, and requiring the pupils to follow with eye and finger. Then, turning again to the beginning, he read over the first chapter ; after which the pupils were permitted to read, each one pronouncing four lines. Reading having been learned in this way, the study of grammar was begun. The teacher first read and explained some section of the grammar, for example, that treating of nouns ; then the pupils read the same one or more times ; after which they took up the book previously used in reading, and with the aid of the teacher pointed out the substantives. In this way all the principles of grammar were exemplified.

^ In Latin, as in the mother-tongue, grammar followed reading. Terence was the favorite author for beginners. A translation of some one of his plays was first placed in the pupil's hands. "The master then," to use Quick's convenient condensation of the tedious German account,

"translated the play to them, each half-hour's work twice over. At the next reading the master translated the first half-hour, and the boys translated the same piece the second. Having thus got through the play, they began again, and only the boys translated. After this there was a course of grammar, which was applied to the Terence, as the grammar of the mother-tongue had been to Genesis. Finally, the pupils were put through a course of exercises, in which they had to turn into Latin sentences imitated from the Terence, and differing from the original only in the number or person used."

The school at Köthen did not have the success that these methods would seem to assure; on the contrary, it turned out a complete failure. Several external causes concurred in bringing this about. Ratich displeased his patrons, who were all Calvinistic, by his uncompromising Lutheranism; he offended his colleagues and supporters by his arrogance, and he provoked unfriendly criticism. His school was soon in disorder. And, having fallen into a quarrel with the prince, he was thrown into prison, from which he obtained his release only upon signing a declaration that "he had claimed and promised more than he knew or could bring to pass."

After his failure and humiliation at Köthen, Ratich endeavored for many years to establish his system elsewhere; but, during the commotions of the Thirty Years' War, he was able to accomplish but little. His theories, however, are not to be judged by his failure as a teacher. Many of his educational principles are excellent; and, though he failed in the attempt to apply them, they have survived, and enter into the education of the

present. His chief educational maxims are the following:

1. Everything after the order or course of nature. All teaching that is forced, violent, or contrary to nature, is harmful.

2. Teach only one thing at a time. There is nothing that hinders the understanding more than the attempt to learn many things at once.

3. Often repeat the same thing. It thus sinks deeply into the understanding.

4. Everything first in the mother-tongue. The pupil's attention is thus fixed only upon what he has to learn, and not upon the medium through which he learns it.

5. Everything without compulsion. Compulsion is against nature, and also renders studies hateful to the young.

6. Nothing should be learned by rote. This is hurtful to the understanding.

7. There should be uniformity in all things, in methods of teaching, as well as in the form of text-books.

8. First the thing itself, then the manner of the thing. Rules without matter confuse the understanding.

9. Teach everything by experiment and analysis. Nothing should be received on mere authority; the reason and evidence should be examined and apprehended.

These principles, though liable to abuse, are a valuable contribution to pedagogy. They show the pedagogical insight of Ratich, and establish his claim to an honorable place among educational reformers. The nature of his work has been thus summed up by Paroz: "Ratich, as we have just seen, is dissatisfied with the

past, and commences in Germany the reaction against the defective system of study inaugurated and perfected by men like Luther, Trotzendorf, Sturm, and the Jesuits—a system whose base, middle, and summit was Latin, a servile imitation of Cicero. His attempts were unskillful, and his principles commonly exaggerated. It is not astonishing, therefore, that he succumbed in an undertaking above his strength, and when he had the age against him, instead of for him, as the men whom I have just named. Nevertheless, he has brought out, like Montaigne, a truth which no force will henceforth be able to overthrow, namely, that the old methods—if we may so call an empirical instruction based on memory and imitation—are defective, and that it has become necessary to reform our instruction by methods based on nature, and by the adoption of new subjects, such, for example, as the mother-tongue.”

(E.) COMENIUS.

The most celebrated educational reformer of the seventeenth century was John Amos Comenius. He was born in Moravia, March 28, 1592. His family belonged to that body of Protestants known as Moravian Brethren. Though few in number, this body has always been distinguished for simplicity of faith, earnest piety, and missionary zeal. These characteristics were early developed in Comenius, and they imparted to his long life of labor and trial peculiar beauty.

As with many other illustrious men, little is known of his early years. When quite young he lost his parents, and was brought up under the care of guardians. He received the limited instruction in reading, writing,

arithmetic, and the catechism imparted in the primary schools of the time. It was not till the age of sixteen that he began the study of Latin, then the staple of learning. "Yet, by the goodness of God," he says, "that taste bred such a thirst in me that I ceased not from that time, by all means and endeavors, to labor for the repairing of my lost years."

It was, perhaps, a fortunate circumstance that he entered upon the study of Latin so late. He was better able to judge of the methods and discipline to which he had to conform. He recognized many of the prevalent errors, and busied his youthful fancy in devising improvements. He thus portrays the schools of his time: "They are the terror of boys, and the slaughter-houses of minds—places where a hatred of literature and books is contracted, where ten or more years are spent in learning what might be acquired in one, where what ought to be poured in gently is violently forced in and beaten in, where what ought to be put clearly and perspicuously is presented in a confused and intricate way, as if it were a collection of puzzles—places where minds are fed on words."

Comenius completed his studies at the College of Herborn and the University of Heidelberg. In 1616 he was ordained to the ministry in the Moravian Church, and was placed over the congregation in Fulneck. Along with his pastoral duties, he had charge of a recently established school, and began to consider more fully the subject of education. Here he married, and for two or three years he led an active and happy life—the only period of tranquillity he was ever to enjoy in his native country. The Thirty Years' War broke out,

and made troublous times. In 1621 Fulneck was taken by the Spaniards, and Comenius lost all his property. Instigated by the Jesuits, the Austrian Government proscribed the evangelical pastors, and forced them to fly. Comenius took refuge for a time in his native mountains, but, as the persecution waxed hotter, he fled to Lissa, in Poland. On crossing the border, he devoutly knelt and prayed God that the truth might not be quenched in his native land.

At Lissa he found employment in the Moravian Gymnasium, of which he seems to have become rector. He applied himself with new ardor to his educational studies. He acquainted himself with the best educational writings of the age, perusing among others the works of Ratich and Bacon. He was greatly impressed by them. "Yet," he says, "observing here and there some defects and gaps as it were, I could not restrain myself from attempting something that might rest upon an immovable foundation, and which, if it could be found out, should not be subject to any ruin. Therefore, after many workings and tossings of my thoughts, by reducing everything to the immovable law of Nature, I lighted upon my *Didactica Magna*, which shows the art of readily and solidly teaching all men all things." In this work, which was not published for several years, Comenius made a comprehensive and profound study of education, and announced those principles which were destined to transform the schools of all Christian lands.

He next set about reforming the methods of teaching Latin. Too much time was given to words. "If so much time is to be spent on the language alone," he says, "when is the boy to know about things—when

will he learn philosophy, when religion, and so forth? He will consume his life in preparing for life." To remedy this evil, he prepared his "Gate of Tongues Unlocked" (*Janua Linguarum Reserata*), the character of which he fully sets forth in the following extract: "My fundamental principle—an irrefragable law of didactics—is that the understanding and the tongue should advance in parallel lines always. The human being tends to utter what he apprehends. If he does not apprehend the word he uses, he is a parrot; if he apprehends without words, he is a dumb statue. Accordingly, under one hundred heads, I have classified the whole universe of things in a manner suited to the capacity of boys, and I have given the corresponding language. I have selected from lexicons the words that had to be introduced, and I include eight thousand vocables in one thousand sentences, which are at first simple, and thereafter gradually become complex. I have used words, as far as practicable, in their primary signification, according to the comprehension of the young, but have had to seek for modern Latin words where pure Latin was not to be had. I have used the same word only once, except where it had two meanings. Synonyms and contraries I have placed together, so that they may throw light upon one another. I have arranged the words so as to bring into view concords and governments and declension."

As this passage shows, the "Gate of Tongues" possessed several great merits. It was suited to the pupil's capacity; it carried him along by easy gradations; and, above all, it taught him things in connection with words. Its success was instantaneous and immense. It was

translated into Greek, Bohemian, Polish, German, Swedish, Belgian, English, French, Spanish, Italian, Hungarian, Turkish, Arabic, and one of the languages of India.

It is now time to speak of a scheme to which Comenius long gave affectionate thought and zealous labor. Its realization he believed for many years was to constitute his principal life-work. This scheme, suggested to him by Bacon, was the publication of a work that would embrace and fully exhibit the whole circle of knowledge. This vast undertaking, which Comenius believed would be very helpful to the advancement of science, was obviously beyond the powers of any one man. Hence his practical mind suggested the establishment of an institution, in which all departments of learning should be represented by the ablest scholars, and from which this encyclopædia of knowledge was to proceed.

It was in relation to this great pansophic scheme that Comenius was invited by the English Parliament to London. He went there in 1641, and promising measures were taken to open a "universal college." "But," as he tells us in his own account of the visit, "a rumor that Ireland was in a state of commotion, and that more than two hundred thousand of the English had been slaughtered there in one night, the sudden departure of the king from London, and the clear indications that a most cruel war was on the point of breaking out, threw all our plans into confusion, and compelled me and my friends to hasten our return."

At this juncture Comenius was invited to Sweden. He was kindly received at Stockholm by the illustrious statesman, Oxenstiern, and Chancellor Skytte, of the University of Upsala. His didactic and pansophic schemes

were fully discussed. "For four days," he says, "these two men held me in debate, but chiefly Oxenstiern, that eagle of the North, who questioned me as to my principles, both pansophic and didactic, with a greater penetration and closeness than had been exhibited by any of the learned with whom I had come in contact. For the first three days didactic was the subject of his examination, and he brought the interviews to an end with the following remarks: 'From youth up I have perceived a certain violence in the customary method of school studies, but I could never put my finger on the place where the shoe pinched. When sent by my king, of glorious memory,* as an embassador to Germany, I conferred with many learned men on the subject; and when I was informed that Wolfgang Ratich had attempted a reform of method, I had no peace of mind till I had the man before me; but he, instead of a conversation, presented me with a huge book in quarto. I swallowed that annoyance, and, having run through the whole volume, I saw that he had exposed the diseases of the schools not badly; but, as for the remedies, they did not seem to me to be adequate. Your remedies rest on firmer foundations; go on with your work.'"

The pansophic plans of Comenius were not encouraged by Oxenstiern; and, as a result of this conference, he was induced to prepare a work in which his principles should be carefully wrought out in reference to teaching languages. For this purpose, he took up his residence at Elbing, in Prussia, where he was supported by De Geer, a wealthy and intelligent Dutchman. Here, after four years of labor, he produced his "Latest

* Gustavus Adolphus.

Method with Languages" (*Methodus Linguarum Novissima*). In this work he points out three evils in the current teaching of Latin: 1. That words are taught without being understood; 2. That boys are introduced at once into the intricacies of grammar; and, 3. That they are required to make impossible leaps, being forced prematurely into works above their comprehension. In this connection, he laid down the important principles that words and things should be learned together; that theory should not be dissevered from practice, and that study should advance by easy gradations.

No sooner had Comenius accomplished the work assigned him by his Swedish advisers, than he received a call to reform the schools of Transylvania, in Hungary. Accordingly, he went, in 1650, to the town of Patak, where he established a model school. This he designed, under the patronage of wealthy friends, to develop into a pansophic institution; but it appears that he never organized more than the lower classes.

He remained at Patak four years, which were characterized by surprising literary activity. During this short period he produced no less than fifteen different works, among them his "World Illustrated" (*Orbis Pictus*), the most famous of all his writings. This work contained, as stated in the title-page, "the pictures and names of all the principal things in the world, and of all the principal occupations of man." It admirably applied the principle that words and things should be learned together. It contained not only a simple treatment of things in general, but also pictures to illustrate the subject of each lesson. The philosophic basis of the work is presented by Comenius in the following extract:

"The foundation of all learning consists in representing clearly to the senses sensible objects, so that they can be apprehended easily. I maintain that this is the basis of all other actions, inasmuch as we could neither act nor speak wisely unless we comprehended clearly what we wished to say or do. For it is certain that there is nothing in the understanding which has not been previously in the sense; and consequently, to exercise the senses carefully in discriminating the differences of natural objects, is to lay the foundation of all wisdom, all eloquence, and all good and prudent action." The "World Illustrated" had an enormous circulation, and remained for a long time the most popular text-book in Europe.

In 1654 Comenius returned to his former home at Lissa. Here one more misfortune awaited him before the close of his eventful career. When that town was plundered by the Poles, in 1656, Comenius lost his house, books, and, above all, his manuscripts, which embodied the labors of many years. "This loss," he said, "I shall cease to lament only when I cease to breathe." After several months' wandering in Germany, he was offered an asylum in Amsterdam by Laurence de Geer, the son of his former patron. Here, in comparative ease, he spent the remaining years of his life, devoting himself to teaching as a means of support, and to the promulgation and defense of his educational views. Through the liberality of friends, he was enabled to publish a complete edition of his works. His last days were somewhat embittered by envious attacks upon his character and methods, but in all his trials he exhibited a meek, forbearing, Christian spirit. He died in 1671, at the advanced age of eighty years.

"Comenius," says Raumer, "is a grand and venerable figure of sorrow. Wandering, persecuted, and homeless, during the terrible and desolating Thirty Years' War, he yet never despaired, but with enduring truth, and strong in faith, he labored unweariedly to prepare youth by a better education for a better future. Suspended from the ministry, as he himself tells us, and an exile, he had become an apostle to the Christian youth; and certainly he labored for them with a zeal and love worthy of the chief of the apostles."

Such, in imperfect outline, was the life of this great man. But, in order to appreciate him fully, we must turn for a moment to the consideration of his educational principles. Unlike many of his predecessors, he did not confine himself to the enunciation of isolated principles. He sought first of all an immovable foundation, and on this he erected his system with close logical sequence. His reforms were as thorough as they were comprehensive. He conceived of education as a development of man in all his faculties; he based all his methods on the order of nature; he regarded the perfect man as the end of all culture. "The right instruction of youth," he says, "does not consist in cramming them with a mass of words, phrases, sentences, and opinions collected from authors, but in unfolding the understanding that many little streams may flow therefrom as from a living fountain. Hitherto the schools have not labored that the children might unfold like the young tree from the impulse of its own roots, but have been contented when they covered themselves with foreign branches. Thus they have taught the youth, after the manner of *Æsop's* crow, to adorn themselves with strange feathers. Why

shall we not, instead of dead books, open the living book of Nature? Not the shadows of things, but the things themselves, which make an impression on the senses and the imagination, are to be brought before youth. By actual observation, not by a verbal description of things, must instruction begin. From such observation develops a certain knowledge. Men must be led as far as possible to draw their wisdom not from books, but from a consideration of heaven and earth, oaks and beeches; that is, they must know and examine things themselves, and not simply be contented with the observations and testimony of others." This brief extract contains the two fundamental truths upon which all correct education must rest.

The following principles, gleaned from the works of Comenius, will exhibit his greatness as an educational reformer, and also the extent to which the improved education of the present is indebted to him:

1. Education is a development of the whole man.
2. Educational methods should follow the order of Nature.
3. Both sexes should receive equal instruction, since the end of education is individual development.
4. Learning should be made agreeable. Teachers should always have something interesting and profitable to communicate to their classes. School-houses should be made comfortable and attractive.
5. If the superstructure is not to totter, the foundation must be laid well.
6. Many studies are to be avoided as dissipating the mental strength.

7. There should be an easy gradation in studies, the one leading naturally to the other.

8. Things naturally connected in themselves should be joined together in teaching.

9. Nothing should be taught that is not of solid utility.

10. Studies should be adapted to the capacity of the pupil.

11. Nothing is to be learned by heart that is not first thoroughly understood.

12. Let nothing that admits of sensible or rational demonstration be taught by authority.

13. Let no task be assigned until the method of doing it has been explained.

14. In the sciences the student should have the objects studied before him.

15. In languages the mother-tongue is to come first, next the languages of neighboring nations, then Latin as the language of the learned world. Theologians and physicians should study Greek.

16. Languages are to be learned by practice rather than by rule. Rules should follow and confirm practice.

17. Words should be learned in connection with things. The object first, then the expression.

18. The concrete should precede the abstract; the simple, the complex; the nearer, the more remote.

19. Things to be done should be learned by doing them. "Mechanics," Comenius says, "understand this well; they do not give the apprentice a lecture upon their trade, but they let him see how they as masters do; then they place the tool in his hands, teach him to

use it, and imitate them. Doing can be learned only by doing, writing by writing, painting by painting, and so on."

20. Religion is of supreme importance; and, in addition to religious instruction, the young should be accustomed to the exercise of Christian virtues, such as temperance, justice, compassion, patience, and so on.

21. Discipline should aim at improving the character.

22. The teacher should be an example, in person and conduct, of what he requires of his pupils.

Of these principles, the first two are fundamental. Nearly all of them were directly opposed to the practice of the seventeenth century; many of them are now regarded as axiomatic truths, and are rapidly reforming and elevating the schools of Christendom. They entitle Comenius to rank among the world's greatest educational reformers.

The school system proposed by Comenius is not unworthy of mention. It embraced four grades of schools. The first was the domestic school, in which the child was to learn the use of its senses, acquire its native language, and gain a rudimentary knowledge of things in general. The next was the vernacular, or popular school. This the child attended from the age of six to twelve, and studied reading, writing, arithmetic, singing, the catechism, history, and geography. Then followed the Latin school, in which the young student devoted six years to grammar, physics, mathematics, ethics, logic, and rhetoric. Lastly, the university, as the home of all branches of learning, formed the natural completion of the system.

We close this sketch of the life and educational principles of Comenius with an extract from his last work, written when he had attained the advanced age of seventy-seven. It shows us the great, unselfish spirit that animated him in his labors, and sustained him in his trials: "I thank my God," he says, "who has willed that I should be my life long a man of aspiration. For aspiration after the good, whatever may be its form in the heart, is a stream that flows from the source of all good—from God. I have said that I have undertaken all my labors for the Lord and his people from love; I am not conscious of any other motive, and accursed be every hour and every moment that was otherwise employed! One of my chief concerns related to the improvement of schools, which I undertook and continued many years from a desire to deliver the youth from the toilsome labyrinths in which they were entangled. Some regarded this foreign to the office of a minister, as if Christ had not bound together the two injunctions, 'Feed my sheep' and 'Feed my lambs,' and laid them upon the beloved Peter. To Christ, my eternal love, I give unending thanks that he has placed such affection to his lambs in my heart, and has given me, to some degree at least, his blessing. I hope and confidently expect from my God that my reforms will spring into light, when the winter of the Church is past, the rains have ceased, and the flowers come forth in the land; when God grants his flock shepherds after his own heart, who will feed not themselves but the flock of the Lord; and when the envy that is directed against men while living will cease when they are dead."

(F.) LOCKE.

John Locke was borne at Wrington, near Bristol, in 1632. His father served as captain in the Parliamentary army during the Civil War. After receiving a preparatory training at Westminster School, he proceeded to Oxford, where he took his bachelor's degree in 1655. He was endowed with a penetrating and practical mind, and, like Bacon at Cambridge, he early found fault with Oxford on account of its extreme conservative tendencies. "That university," says Lewes, "was distinguished then, as it has ever been, by its attachment to whatever is old—the past is its model, the past has its affection. That there is much good in this veneration for the past, a few will gainsay. Nevertheless, a university which piqued itself on being behind the age, was scarcely a fit place for an original thinker. Locke was ill at ease there. The philosophy upheld there was scholasticism. On such food, a mind like his could not nourish itself. Like his great predecessor, Bacon, he imbibed a profound contempt for the university studies, and in after-life regretted that so much of his time should have been wasted on such profitless pursuits."

After taking his degree Locke studied medicine, not with the view of becoming a practitioner, but of improving his feeble health. In this study he made noteworthy attainments, as is shown in the following encomium, which is quoted more particularly for its reference to his intellectual and moral character. Says Dr. Thomas Sydenham, in a work on medicine: "You know likewise how much my method has been approved of by a person who has examined it to the bottom, and

who is our common friend—I mean Mr. John Locke—who, if we consider his genius, and penetrating and exact judgment, or the purity of his morals, has scarce any superior, and few equals, now living.”

After spending a year at the court of Berlin, as secretary to the English envoy, Sir William Swan, he returned to Oxford, where he then made the acquaintance of the Earl of Shaftesbury. By this nobleman, who appreciated his extraordinary ability, he was introduced into the society of the great, whom he attracted by his unusual colloquial powers. But, in all his associations with people of rank, he did not lose his independence of character. He even ventured on one occasion to administer a delicate but effective rebuke. One day three or four lords engaged in a game of cards in his presence. After looking on for some time, he took out his notebook, and began to write attentively. Having been asked by one of the nobles what he was writing, he replied: “My lord, I am endeavoring to profit, as far as I am able, in your company; for, having waited with impatience for the honor of being in an assembly of the greatest geniuses of this age, and at last having obtained the good fortune, I thought I could not do better than write down your conversation; and, indeed, I have set down the substance of what hath been said for this hour or two.” The rebuke was taken in good part; and, giving up their game, the lords entered into conversation better suited to their character.

Locke superintended the education of the Earl of Shaftesbury's son. Subsequently he was charged with the delicate task of choosing a wife for his pupil, and was fortunate enough to make a happy selection. The

education of the oldest son by this marriage, a boy of bright parts, was intrusted to Locke; and, as in the case of the father, the result was highly gratifying. His pupil afterward became an author of some reputation. In acting as tutor in the Earl of Shaftesbury's family, Locke had his acute understanding specifically directed to the subject of education, and it was in the observations and experience of these years that he developed the independent views afterward embodied in his educational treatise, presently to be noticed.

Locke lived on terms of close intimacy with the Earl of Shaftesbury, and was appointed by him to an important government office. This fact involved him in the political troubles of his generous patron; and, when that nobleman was banished from England, Locke deemed it prudent to follow him. During his voluntary exile in Holland, Locke was unjustly accused of writing certain seditious tracts against the English Government; and, under this suspicion, he was deprived of his place as student of Christ-Church College, Oxford. His surrender by the Government of Holland was demanded by the English envoy, but he escaped by concealment.

In 1688, with the accession of William and Mary, Locke found it safe to return to his native land. Here, the year following, he published his great philosophical work, "An Essay concerning Human Understanding," which was designed to establish the limitations and capabilities of the mind. It had a wide circulation not only in England, but also in France and Germany; and everywhere it exerted an immense influence upon philosophic thought.

In 1693 he published a treatise entitled "Some Thoughts concerning Education." Two years later he received from King William the appointment of Commissioner of Trade and Plantations; but, after serving several years in this position, he was obliged by failing health to resign, and to seek the fresh air of the country. He retired to Oates, in Essex, and spent the few remaining years of his life in peaceful retirement. He died in 1704.

After a brief biographical sketch, Raumer says: "From this account of Locke's life, we are able to anticipate the nature of his pedagogical views. As a physician, whose duty it was to keep an invalid pupil from dying, he was obliged to pay especial attention to health; as a man who held several public offices, associated with the most distinguished statesmen, and educated a statesman's son, he attached more importance to the practical side of education than to mere learning; he could not avoid recognizing the principles of the nobility, especially that of honor, likewise their views of what belongs to an educated nobleman, and imbibing antipathy toward learned pedantry."

"Locke is a thorough Englishman," says Karl Schmidt, "and the principle underlying his education is the principle according to which the English people have developed. Hence, his theory of education has in the history of pedagogy the same value that the English nation has in the history of the world. He stood in strong opposition to the scholastic education current in his time, a living protest against the prevailing pedantry; in the universal development of pedagogy he gives impulse to the movement which grounds education

upon sound psychological principles, and lays stress upon breeding and the formation of character."

Locke begins his "Thoughts concerning Education" with these words: "A sound mind in a sound body is a short but full description of a happy state in this world; he that has these two has little more to wish for; and, he that wants either of them, will be but little the better for anything else." The attainment of this happy condition is the end of education.

According to Locke, education in its widest sense is the molding force of life. The early surroundings and impressions of childhood are of weighty consequence. "It is education," he says, "which makes the great difference in mankind. The little, or almost insensible, impressions on our tender infancies, have very important and lasting consequences; and then it is, as in the fountains of some rivers, where the gentle application of the hand turns the flexible waters into channels that make them take quite contrary courses; and, by this little direction, given them at first, in the source, they receive different tendencies, and arrive at last at very remote and distant places."

Locke did not set much store by mere bookish learning. In his mind, the function of education was to form noble men well equipped for the duties of practical life. He says: "You will wonder, perhaps, that I put learning last, especially if I tell you I think it the least part. . . . When I consider what ado is made about a little Latin and Greek, how many years are spent in it, and what a noise and business it makes to no purpose, I can hardly forbear thinking that the parents of children still live in fear of the schoolmaster's rod, which they look

on as the only instrument of education ; as if a language or two were its whole business. How else is it possible that a child should be chained to the oar seven, eight, or ten of the best years of his life, to get a language or two, which I think might be had at a great deal cheaper rate of pains and time, and be learned almost in playing? . . . Reading and writing, and learning, I allow to be necessary, but yet not the chief business. I imagine you would think him a very foolish fellow that should not value a virtuous, or a wise man, infinitely before a scholar. Not but that I think learning a great help to both, in well-disposed minds ; but yet it must be confessed, also, that in others not so disposed it helps them only to be the more foolish, or worse men. I say this, that, when you consider of the breeding of your son, and are looking out for a schoolmaster, or a tutor, you would not have (as is usual) Latin and logic only in your thoughts. Learning must be had, but in the second place, as subservient only to greater qualities. Seek out somebody that may know how discreetly to frame his manners ; place him in hands, where you may, as much as possible, secure his innocence, cherish and nurse up the good, and gently correct and weed out any bad inclinations, and settle in him good habits. This is the main point ; and, this being provided for, learning may be had into the bargain."

"Virtue as the first and most necessary of those endowments that belong to a man or a gentleman," was based on religion. "As the foundation of this," says Locke, "there ought very early to be imprinted on his mind a true notion of God, as of the independent Supreme Being, Author and Maker of all things, from

whom we receive all our good, who loves us, and gives us all things; and, consequent to this, instill into him a love and reverence of this Supreme Being. This is enough to begin with, without going to explain this matter any further, for fear, lest by talking too early to him of spirits, and being unreasonably forward to make him understand the incomprehensible nature of that Infinite Being, his head be either filled with false, or perplexed with unintelligible notions of him. Let him only be told upon occasion that God made and governs all things, hears and sees everything, and does all manner of good to those that love and obey him."

Locke attached great importance to the care of the body, and devotes the first part of his book to a consideration of the hygienic laws to be observed. He concludes his observations with these remarks: "And thus I have done with what concerns the body and health, which reduces itself to these few and easily observable rules: Plenty of open air, exercise, and sleep; plain diet, no wine or strong drink, and very little or no physic; not too warm and strait clothing; especially the head and feet kept cold, and the feet often used to cold water and exposed to wet." The wisdom of these rules, except the last, has been sufficiently established.

The disposition and native capacity of pupils should be considered in the work of education. Children are not to be regarded as insensible objects to be dealt with in a blind, mechanical way, but as living creatures to be carefully nurtured and developed. "He therefore that is about children," says Locke, "should well study their natures and aptitudes, and see, by often trials, what turn they easily take, and what becomes them; observe what

their native stock is, how it may be improved, and what it is fit for; he should consider what they want, whether they be capable of having it wrought into them by industry, and incorporated there by practice; and whether it be worth while to endeavor it. For, in many cases, all that we can do, or should aim at, is to make the best of what Nature has given, to prevent the vices and faults to which such a constitution is most inclined, and give it all the advantages it is capable of. Every one's natural genius should be carried as far as it could, but, to attempt the putting another upon him, will be but labor in vain; and, what is so plastered on, will at best sit but untowardly, and have always hanging to it the ungracefulness of constraint and affectation."

The exercises imposed upon pupils should be wisely adjusted to their powers and attainments. Locke condemned the practice then in vogue of requiring verses and essays on abstract subjects necessarily beyond the pupil's capabilities. The study of language should be combined with an acquisition of substantial knowledge. "The learning of Latin," he says, "being nothing but the learning of words, a very unpleasant business both to young and old, join as much other knowledge with it as you can, beginning still with that which lies most obvious to the senses—such as is the knowledge of minerals, plants, and animals, and particularly timber and fruit-trees, their parts and ways of propagation, wherein a great deal may be taught a child, which will not be useless to the man; but, more especially, geography, astronomy, and anatomy. But, whatever you are teaching him, have a care still that you do not clog him with too much at once; or make anything his business but

downright virtue, or reprove him for anything but vice, or some apparent tendency to it."

Of foreign languages Locke maintained that French should be learned first, then Latin; but these languages should not exclude attention to English. The mother-tongue has the highest claims upon us. "This I think will be agreed to," says Locke, "that if a gentleman is to study any language it ought to be that of his own country, that he may understand the language which he has constant use of with the utmost accuracy." And again, "Since it is English that an English gentleman will have constant use of, that is the language he should chiefly cultivate, and wherein most care should be taken to polish and perfect his style."

Locke thought that the importance of a knowledge of Latin was overrated. Though regarding it indispensable to the wealthy English gentleman, he disapproved of forcing Latin upon children who would find no use for it in subsequent life. "Latin I look upon as absolutely necessary to a gentleman," he says; "and indeed custom, which prevails over everything, has made it so much a part of education that even those children are whipped to it, and made spend many hours of their precious time uneasily in Latin, who, after they are once gone from school, are never to have more to do with it as long as they live. Can there be anything more ridiculous than that a father should waste his own money, and his son's time, in setting him to learn the Roman language, when, at the same time, he designs him for a trade, wherein he, having no use of Latin, fails not to forget that little which he brought from school, and which it is ten to one he abhors for the ill-usage it pro-

cured him? Could it be believed, unless we had everywhere among us examples of it, that a child should be forced to learn the rudiments of a language, which he is never to use in the course of life that he is designed to, and neglect all the while the writing a good hand, and casting accounts, which are of great advantage in all conditions of life, and to most trades indispensably necessary?"

Locke maintained that the best way to learn a language, whether ancient or modern, was by practice rather than by rule. He attached less importance to grammar than was common in his day. "I would fain have any one name to me that tongue, that any one can learn to speak as he should do, by the rules of grammar. Languages were made not by rules of art but by accident, and the common use of the people. And he that will speak them well has no other rule but that, nor anything to trust to but his memory, and the habit of speaking after the fashion learned from those that are allowed to speak properly, which, in other words, is only to speak by rote. It will possibly be asked here, 'Is grammar then of no use?' . . . I say not so; grammar has its place too. But this I think I may say, there is more stir a great deal made with it than there needs, and those are tormented about it to whom it does not at all belong; I mean children, at the age wherein they are usually perplexed with it in grammar-schools."

If space allowed, it would be interesting and profitable to extend these quotations further, for Locke's treatise abounds in wise and suggestive thought. But we conclude this sketch with the following excellent sum-

mary from Quick : "Locke's aim was to give a boy a robust mind in a robust body. His body was to endure hardness, his reason was to teach him self-denial. But this result was to be brought about by leading, not driving him. He was to be trained, not for the university, but for the world. Good principles, good manners, and discretion, were to be cared for first of all ; intelligence and intellectual activity next ; and actual knowledge last of all. His spirits were to be kept up by kind treatment, and learning was never to be a drudgery. With regard to the subjects of instruction, those branches of knowledge which concerned things were to take precedence of those which consist of abstract ideas. The prevalent drill in the grammar of the classical languages was to be abandoned, the mother-tongue was to be carefully studied, and other languages acquired either by conversation, or by the use of translations. In everything the part the pupil was to play in life was steadily to be kept in view ; and the ideal which Locke proposed was not the finished scholar, but the finished gentleman."

The reaction hitherto considered against abstract theological and humanistic education was chiefly philosophical and realistic. We pass now to the consideration of another reaction that had its basis in religion, and was common to both the Catholic and the Protestant Church, though it assumed a different form in each. Europe had just passed through the misfortunes and sorrows of the Thirty Years' War, and men were in a condition to realize the insufficiency of a religion that consisted in outward forms and mere intellectual assent to doctrinal

systems. The need of a religion of the heart and life was felt.

(G.) Jansenism.

This was a movement in the Roman Catholic Church in favor of more evangelical doctrine and greater practical piety. It is named from its originator, Jansenius, a bishop in the Netherlands, who was an ardent admirer of Augustine, and reproduced the doctrinal views of that ecclesiastical father in a work published posthumously in 1640. The opinions thus set forth stood in sharp contrast with the prevailing practice of the Jesuits, and found a wide acceptance and vigorous promulgation. "In the view of the Jansenists," says Mosheim, "there is nothing entirely sound and uncorrupted in the practice and institutions of the Romish Church. In the first place, they complain that the whole body of the clergy have forsaken altogether the duties of their office. They, moreover, assert that the monks are really apostates, and they would have them be brought back to their pristine sanctity, and to that strict course of life which the founders of the several orders prescribed. They would also have the people well instructed in the knowledge of religion and Christian piety. They contend that the sacred volume, and the books containing the forms of public worship, should be put into the hands of the people in the vernacular tongue of each nation, and should be diligently read and studied by all. And, lastly, they assert that all the people should be carefully taught that true piety toward God does not consist in external acts and rites, but in purity of heart and divine love." In practice the Jansenists were harshly ascetic. Their doctrines were bit-

terly attacked by the Jesuits, and in the prolonged controversy that followed Jansenism was finally suppressed.

In France Jansenism had several distinguished adherents, among whom were Pascal and Fénelon. The center of the movement in that country was Port-Royal, an ancient convent, a few miles from Paris, where a number of pious and learned men devoted themselves to study, teaching, and the practice of piety. They gave much attention to the instruction of youth, and by the use of wise methods they achieved excellent results. They prepared neat and excellent text-books on grammar, philosophy, and other branches of knowledge; they translated many of the classic authors; they produced a large number of devotional and practical works, in which they exhibited a pure, chaste, and agreeable style. In connection with their primary schools, they invented and employed the phonic system of spelling. The study of language began with the mother-tongue, and not, as had hitherto been the case in France, with Latin. The doctrine of natural depravity was strongly emphasized in the Jansenistic system, and hence a somewhat rigorous discipline was maintained. A careful and unceasing surveillance was exercised over the pupil. But the hope of a moral reformation was placed, not in rigid discipline, but in divine grace; and the method of dealing with children was reduced by a teacher of Port-Royal to these three precepts: "Speak little, endure a great deal, and pray still more."

The method of conducting the Port-Royal schools has been thus described by an old French writer: "Up to the age of twelve the pupils were occupied with the elements of sacred history, geography, and arithmetic,

under the form of amusements, in a manner to develop their intelligence without wearying it. At twelve years the regular course of study began. The hours of study and recitation were fixed, but not in an absolute way. If study sometimes intrenched upon recreation, recreation also had its turn, for circumstances were taken into account. In winter, when the weather permitted, the teacher gave his lesson while taking a walk with his pupils. Sometimes they left him to climb a hill or run in the plain, but they came back to listen to him. In summer the class met under the shade of trees by the side of brooks. The teacher explained Virgil and Homer; he commented upon Cicero, Aristotle, Plato, and the fathers of the Church. The example of the teachers, their conversation and familiar instruction, all that the pupil saw, all that he heard, inspired him with a love for the beautiful and the good."

We are now prepared to form some idea of the Port-Royal education, and to see its direct opposition to the Jesuit system. It ranges the teachers of Port-Royal by the side of the illustrious educational reformers considered in the preceding section. It simplified studies, and made them pleasant to the pupil; it gave a worthy prominence to the mother-tongue; it developed the understanding along with the memory; it imparted substantial knowledge in connection with words; it developed the faculties, paid attention to the body, and watched over the formation of character. For the rest, the language of Paroz is adopted: "In persecuting the Protestants, and in suppressing Jansenism, Louis XIV. deprived Christianity in France of its power and freedom, and prepared the way for the mocking and frivolous

unbelief of the eighteenth century. During the past few years distinguished *savants*, like Cousin, Faugère, Vinet, and especially Sainte-Beuve, have called the attention of the French people to the work, too long forgotten, of Port-Royal; they have drawn from that source subjects of study that have had a high literary, philosophical, religious, and educational significance. If France had developed the pedagogical work commenced by Port-Royal, it would be further advanced by almost two centuries. The whole of the eighteenth century and the first third of the nineteenth dragged themselves along in sterile philosophical and political theories; it is only within the past few years that good educational works are beginning to appear again in France, taking up the thread broken by Louis XIV."

After these remarks in general upon the educational system of Port-Royal, it is necessary to speak of two distinguished educators who held, more or less fully, its religious and educational views. These are Fénelon and Rollin.

(H.) FÉNELON.

This celebrated author and teacher was born in the province of Périgord, in 1651. From an early age he was remarkable for industry, for his amiable disposition, and thirst for knowledge. Up to the age of twelve his education was conducted at home; he was then sent to Cahors, and two years later to Paris, where his course of instruction was completed. Destined to the clerical office by his family, and inclined toward it by natural gifts and disposition, he entered the theological seminary of Saint-Sulpice, and won general esteem by his

application, ability, and exemplary character. He was ordained priest at the age of twenty-four, and was shortly afterward placed over an institution in Paris designed for the instruction of young women who had renounced the Protestant faith. "No person," says Roche, "was more capable than he of rendering virtue attractive by that touching and effective language which addresses itself to the heart and inspires confidence. To this precious gift he joined the merit of giving his instructions that simple, clear, and agreeable form that placed them within reach of all minds." He spent ten years of his life as director of this institution, and it was while in charge of it that he wrote his excellent work on the "Education of Girls," presently to be noticed at some length.

After the revocation of the Edict of Nantes, Fénelon was placed at the head of a mission that was sent to Poitou to labor for the conversion to Romanism of the Protestant portion of the population. He fulfilled the trying duties of this office with gentleness and toleration; and such was the affability of his manners and the charm of his discourse that his labors were not unattended with success.

In 1689 he was appointed tutor to the young Duke of Burgundy, grandson of Louis XIV. This young prince was endowed with fine natural abilities, but possessed of an inordinate pride and a furious temper. This rendered Fénelon's task exceedingly difficult, but he discharged its duties with rare wisdom and surprising success. "In a short time," says a writer quoted by Roche, "affection and kindness made a different person of the prince, and changed many and serious faults into

the wholly opposite virtues. From this abyss there came forth a prince affable, gentle, humane, moderate, patient, humble, and self-controlled. Wholly devoted to his obligations, and regarding them as great, he only thought henceforth of uniting the duties of son and subject with those to which he saw himself destined."

The following incident shows the wisdom with which Fénelon knew how to deal with his pupil: In a fit of anger occasioned by a gentle reproof, the young duke once said to him, "I know who I am, and who you are!" Fénelon made no reply; but on the following day, in a tranquil but serious tone, he said to his pupil: "You recall, no doubt, the words you spoke to me yesterday. My duty obliges me to reply to you that you know neither who you are nor who I am. If you think yourself above me, you are mistaken; your birth did not depend upon you and gives you no merit, and I have more prudence and knowledge than you. What you know you have learned from me, and I am above you by reason of the authority which the king and your father have given me over you. It was in obedience to them that I have undertaken the difficult and, as it seems, ungrateful task of being your teacher; but, since you appear to think that I ought to feel particularly fortunate in discharging this duty, I wish to go with you at once to the king and request him to relieve me of my duties and to give you another instructor."

This declaration filled the young prince with alarm, and, bursting into tears, he exclaimed: "I am sorry for what happened yesterday. If you speak to the king, I shall forfeit his friendship. If you leave me, what will be thought of me? Forgive me, and I promise that

you will have no ground of complaint in the future." This was no doubt the result aimed at; but Fénelon did not yield at once, and left his pupil in painful uncertainty for a day, when, assured that the repentance was sincere, he resumed his duties.

In the work of instructing his pupil Fénelon composed fables, compiled histories, and wrote fiction embodying valuable lessons. It was with this view that he wrote his "Telemachus," a work that has a permanent place in the classic literature of France. Under his instruction, which comprehended religion, morals, philosophy, history, languages, literature, and politics, the young prince made admirable attainments. A brilliant future was predicted for him, but death intervened to prevent its realization.

In 1695 Fénelon was elevated to the archbishopric of Cambrai, in recognition of his previous services. He devoted himself conscientiously to the duties of his diocese. He led a life of great simplicity, and divided his time between the administration of affairs and the personal instruction of his flock. Though he had delighted the French court by his eloquence, and had embarrassed Bossuet by his ability, yet he found pleasure in going through the villages of his diocese to teach the simple peasantry the catechism in language suited to their uncultured condition.

The later years of his life were rendered unhappy by theological controversies, by the displeasure of the king, and by the loss of his dearest friends. His sorrows were heavy, but he bore them with touching resignation. "He died," says Lamartine, "like a saint and poet, listening to the sweetest and sublimest hymns,

which carried at the same time his imagination and his soul to heaven."

Fénelon's work on the "Education of Girls" is an admirable treatise. It not only presents advanced views in regard to female education, but it abounds in general pedagogical principles of great wisdom, drawn from a profound acquaintance with child-nature.

Regarding woman as intellectually inferior to man, he excludes her from politics, the law, the ministry, and other masculine vocations. "But what follows," he asks, "from the natural weakness of women? The weaker they are, the more it is important to strengthen them. Have they not duties to perform, duties that constitute the foundation of all human life? Is it not women that ruin and that sustain households, that regulate all the details of domestic matters, and that consequently decide what concerns most nearly the whole human race? In this way they have the principal part in the good or bad morals of almost the whole world. A judicious, diligent, and pious woman is the soul of a household; she establishes order in it for temporal prosperity and salvation. Even men, who have all public authority, are not able by their deliberations to establish any effective measure for good, unless the women aid them in having it executed."

Female education is a necessity. If a girl is left without a proper education, and is allowed to grow up in idleness, she will naturally fall into objectionable habits, and develop a discontented disposition. "Ignorant and idle girls," Fénelon says, "always have a wandering imagination. In the absence of solid instruction, their curiosity turns strongly to vain and dangerous subjects.

Those possessing ability sometimes become affected, and read all the books that can nourish their vanity; they become excessively fond of romances, comedies, and extravagant adventures, with which unworthy love is commingled. They render their minds visionary, in accustoming themselves to the magnificent language of the heroes of romances; they thus disqualify themselves even for society; for all those beautiful, ethereal sentiments, those generous affections, all those adventures invented by the novelist in order to give pleasure, have no relation with the true motives which are operative in the world, and which decide affairs, nor with the failures which we experience in every undertaking."

Education should be commenced at a very early age. "In order to remedy all these evils," says Fénelon, "it is a great advantage to be able to begin the education of girls in infancy. This early age, which is abandoned to indiscreet and sometimes profligate women, is that in which the deepest impressions are made, and which has consequently a strong influence on all subsequent life." This early education should have reference to the body, the mind, and character. The health should be cared for; the faculties should not be prematurely developed; the passions should not be inflamed, and patience and self-denial should be inculcated and practiced.

As the basis of methods of instruction, Fénelon thus portrays the nature of the mind in childhood: "The substance of the brain is soft, and it hardens every day; as for the mind, it knows nothing—everything is new to it. The soft condition of the brain makes it easily susceptible to impressions, and the surprise of novelty easily excites admiration, and renders children very inquisi-

tive. It is true, also, that this humid and soft state of the brain, joined to great warmth, gives it ready and continual motion. Hence comes the restlessness of children, who are unable to fix their minds upon any subject, or their bodies in any place."

Instruction should be made pleasant, and the utility of the subjects taught should be explained. "By all means let the child play," says Fénelon; "let wisdom be forced upon him only at intervals, and with a laughing face; beware of tiring him with injudicious exactions. . . . It is necessary to explain the reason of what one teaches. You should say to your pupils: 'This is to prepare you for your future vocation; this is to form your judgment; this is to accustom you to reason justly upon all the affairs of life.' It is necessary to show them always a solid and agreeable purpose that will sustain them in their efforts, and never to pretend to control them by a dry and absolute authority."

The fondness that children have for history should not be unimproved. Instructive narratives should be presented, particularly those of the Bible; for the latter, apart from historical knowledge, have a moral and religious value. The moral and religious instruction should be watched over with special care, and the faults and weaknesses to which girls are liable should be guarded against. The education of woman should have regard to domestic relations, for whose manifold duties and responsibilities a high degree of wisdom is necessary. Girls should be instructed in reading, writing, and arithmetic; in keeping accounts; in the leading principles of justice and government; and, after these fundamental studies, history, language, literature, music, and painting

might be taught, yet in such a manner as to preserve pupils from all moral injury.

Paroz concludes his study of Fénelon's treatise with the following judicious remarks: "We have to-day educational works that are more complete and systematic, but this one will live because of its excellent spirit and beautiful style. In all ages and in every land it will be read with pleasure and profit. Of all the Catholic clergy who have engaged in educational work, Fénelon has perhaps approached nearest to the rational principles which form the basis of modern pedagogy. The order of Nature has a place in his theology, and he knows how to reconcile the needs of temporal life with the spirit of Christianity. This characteristic will always assign him a high rank among educators."

(L.) ROLLIN.

Rollin, so well known in this country by his "Ancient History," was born at Paris, in 1661. He was the son of a poor but honest cutler, who intended his son to follow the same vocation. He was rescued from this humble state by a Benedictine friar, who discovered young Rollin's abilities, and had him entered at the Collège du Plessis. Having that ardent desire for knowledge, so often accompanying genius, he made rapid progress, and early established a well-founded reputation. He was especially proficient in literary studies. "Go to Rollin," said his professor of rhetoric, when applied to for any prose or poetic composition; "he will do it better than I can." Rollin studied theology three years at the Sorbonne, the most celebrated of the Catholic seminaries of France.

In 1688 he was elevated to the chair of Eloquence in the Royal College of France, and filled the position with zeal and success. He encouraged the study of the French language and literature, and revived an interest in the ancient tongues, particularly in Greek. In 1694 he was appointed rector of the University of Paris, and signalized his brief tenure of two years by the introduction of some salutary reforms. In 1699 he was made principal of the College of Beauvais, and so great had his reputation now become that he soon filled its deserted halls with students. But his life was not to run on smoothly. His adherence to Jansenism, which has already been explained, brought upon him the unrelenting persecution of the Jesuits, and he was forced to give up his position in 1712.

In 1720 he was called from his modest but busy retirement to assume again the management of the university as rector. Six years later he published his "Treatise on Studies," which entitles him to an honorable place in educational history. Not long afterward he completed his "Ancient History," which, despite its credulity, inaccuracy, and excessive admiration for antiquity, possesses a charm that will always render it a pleasing and profitable work.

As a man, Rollin was worthy not simply of respect but also of affection. "In Rollin's character," says a biographer, "learning was ennobled by virtue, and virtue elevated by piety. His piety was not affected—was not the homage that vice pays to virtue, but that of an honest and ardent mind. He lived in what is termed the Augustan age of French literature—the age of Louis XIV.—so much extolled by Voltaire, and was contem-

poraneous with her most celebrated literary characters. Although not entitled to the first rank among the writers of his own country, yet his attainments were great, his talents respectable, his learning extensive, and his taste purified by the models of classical antiquity. It may be affirmed that his virtues were of the first order, and what blemishes were in his character were as small spots in a luminous body."

We now turn to Rollin's "Treatise on Studies," in which he treats of primary education; of the study of language; of poetry; of rhetoric; of the several kinds of eloquence; of history; of philosophy; and of the management of colleges. "The purpose of teachers," says Rollin,* "is not simply to teach their pupils Latin and Greek; to show them how to write exercises, verses, and amplifications; to load their memory with historic facts and dates; to construct syllogisms in due form; and to trace on paper certain lines and figures. This knowledge, I do not deny, is useful and valuable, but as a means and not as an end. . . . The purpose of teachers, in the long course of study, is to accustom their pupils to serious work; to make them esteem and love the sciences; to show them how to make progress; to make them feel the use and value of knowledge—and in this way prepare them for the different pursuits to which Providence may call them. The purpose of teachers, still more than that, is to form the mind and heart of their pupils; to protect their innocence; to inspire them with principles of honor and probity; to have them form good habits; to correct and suppress in

* The rest of this sketch is translated from Paroz, with but few changes.

them, by gentle means, the bad inclinations that may be observed."

Rollin laid great stress upon religious or spiritual education. "What is a Christian teacher charged with the education of the young?" he asks. "He is a man in whose hands Jesus Christ has placed a certain number of children whom he has redeemed by his blood, in whom he lives as his temple, whom he regards as his members, as his brethren, as his co-heirs; of whom he wishes to make kings and priests who will reign and serve God with him and by him through all eternity. And for what purpose has he confided children to them? Is it just to make poets, orators, philosophers, and scholars of them? Who would dare say or even think that? It is for the purpose of preserving in them the precious and inestimable gift of innocence which he has impressed upon their souls by baptism—for the purpose of making true Christians of them. This is the end of education, and all the rest holds the place of means."

What are the qualifications of a teacher? Rollin answers: "When a teacher has asked and received from Jesus Christ, for the management of others and for his own salvation, the spirit of wisdom and knowledge, the spirit of counsel and strength, the spirit of learning and piety, and, above all, the spirit of fear of the Lord, there is nothing further to be said to him; this spirit is an internal teacher that dictates and instructs in everything, and that on every occasion will show him his duties and give him wisdom to perform them. A great indication that one has received it is when he feels an ardent zeal for the salvation of children; when he is touched by their dangers; when he is sensible to their faults;

when he experiences something of the tenderness and solicitude that Paul felt for the Galatians."

Rollin lays down some excellent rules and principles for the management of children :

"1. The first duty of the teacher is to study well the genius and character of children. To wish to place them on the same level, and to subject them to a single rule, is to force nature.

"2. In education the highest skill consists in knowing how to unite, by a wise temperament, a force that restrains children without repelling them, and a gentleness that wins without enervating them.

"3. The short and common method of correcting children is with the rod ; but this remedy sometimes becomes a more dangerous evil than those which one seeks to cure, if it is employed without reason and moderation.

"4. The only vice, it seems to me, that deserves severe treatment is obstinacy in evil, but an obstinacy voluntary, determined, and well defined.

"5. The teacher ought never to punish in anger, especially if the fault which he punishes concerns him personally, such as a want of respect or some offensive speech.

"6. Cuffs, blows, and other like treatment, are absolutely forbidden to teachers. They ought to punish only to correct, and passion does not correct.

"7. It is a quite common fault to make use of reprimands for the slightest faults which are almost inevitable to children. This breaks the force of reprimands, and renders them fruitless.

"8. We should avoid exciting the spite of children

by the harshness of our language, their anger by exaggeration, their pride by marks of contempt.

"9. It is necessary always to show children a substantial and agreeable end which may hold them to work, and never pretend to force them by a direct and absolute authority.

"10. We should run the risk of discouraging children if we never praised them when they do well. Although praises are to be feared because of vanity, it is necessary to make use of them to encourage children, without cultivating that vice.

"11. Rewards are not to be neglected for children, and although they are not, any more than praise, the principal motive to make them act, yet both may become useful to virtue, and a strong incentive to its practice.

"12. It is a great good fortune for young people to find masters whose life is a continual lesson; whose actions do not belie their teaching; who practice what they preach, and shun what they censure; and who are admired more for their conduct than for their instruction."

(J.) PIETISM.

Pietism is a term of reproach fixed upon a worthy movement in the Protestant Church in the direction of a consistent Christian life. This movement was opposed to the formality and inconsistency characteristic of the period of "dead orthodoxy." It was begun by Philip Jacob Spener, a man of fine natural abilities, large attainments, and deep spirituality. As leading pastor at Frankfort-on-the-Main, he began, in 1670, to hold meet-

ings at his house for the promotion of biblical knowledge and the cultivation of evangelical piety. He continued his reformatory efforts at Dresden as chief court-preacher, and afterward at Berlin as provost of the Church of St. Nicholas. "A return from scholastic theology to the holy Scriptures as the living source of all saving knowledge," says Kurtz; "a conversion of the outward orthodox confession into an inner living theology of the heart, and a demonstration thereof in true piety of life—these were the ways and means by which he proposed to effect the desired reform." The Pietistic movement gave rise to a prolonged controversy, whose general influence, in spite of much bitterness and persecution, was favorable to Christian life in the Church.

(K.) FRANCKE.

Pietism was brought into relation with education chiefly by August Hermann Francke, who as a successful and consecrated Christian teacher exerted a wide influence. He was born at Lübeck, on the Baltic, in 1663. He received his preparatory training at the Gymnasium of Gotha, after which he attended the universities of Erfurt and Kiel, studying metaphysics, natural science, history, languages, and theology. A remark of his in reference to this period of his life throws light upon the prevalent method of theological study. "My theology," he says, "I grasped with the head but not with the heart; it was more a dead science than a living knowledge. I indeed knew how to define faith, regeneration, justification, renewal, and so on; also, how to distinguish one from the other, and to prove it by passages from

Scripture; but I found nothing in my heart of it all, and possessed nothing more than what existed in my memory and imagination. Yea, I had no other conception of theological study than that it consisted in having well in mind the theological assemblies and books, and in being able to speak learnedly about them."

After leaving the universities Francke spent a year and a half at Gotha, during which time he read the Hebrew Bible through seven times. In 1684 he went to Leipsic, where his lectures on the Old and New Testaments, differing widely from the cold, logical processes of the universities, attracted considerable attention. He sympathized with Spener's views, and joined the Pietistic reform. In 1687 he went to Hamburg, where he established a primary school that brought him valuable experience and determined the direction of his life. "Upon the establishment of this school," he says, "I learned how destructive the usual school management is, and how exceedingly difficult the discipline of children; and this reflection made me desire that God would make me worthy to do something for the improvement of schools and instruction."

In 1691 the University of Halle was founded, and the following year, through the influence of Spener, Francke was appointed Professor of Greek and Oriental Languages, and at the same time pastor of a suburban church. Here in Halle he accomplished a great work, which stands in educational history almost without a parallel. The beginning was very humble. The poor were accustomed to assemble on Thursday before the parsonage to receive alms. The thought occurred to Francke that the occasion might be improved for re-

ligious instruction. He invited the crowd of young and old into his house, and along with bread he administered spiritual food. He learned the condition of the poorer classes, and his heart was touched by their ignorance and need. He deprived himself of comforts to administer to their necessities. He solicited aid from his friends, and hung up a poor-box to receive contributions. One day he found in it the sum of seven florins, the gift of a benevolent woman. With the joy of faith he exclaimed: "That is a splendid capital, with which I must accomplish something useful; I will begin a school for the poor!" Books were immediately bought, and a needy student of the university engaged to teach the children two hours each day. The undertaking prospered; the parsonage soon became too small; more commodious quarters had to be engaged. With increasing wants came enlarged contributions, and Francke continued to develop his work till it assumed at length immense proportions. At the time of his death, in 1727, it comprised the following institutions:

1. The *Pedagogium*, having eighty-two students. This school was designed for the higher classes, and provided instruction in religion, Latin, Greek, Hebrew, French, German, arithmetic, geography, history, chronology, geometry, astronomy, music, botany, anatomy, and the essential principles of medicine. In order to render instruction as practicable as possible, the school was equipped with a museum of natural history, a chemical laboratory, apparatus for experiments in physics, and a botanical garden. All this marked a departure in the secondary education of the time, and places Francke among the educational reformers.

2. The Latin School of the Orphan House, with three inspectors, thirty-two teachers, four hundred students, and ten servants.

3. The German Burgher School, with four inspectors, one hundred and six teachers, and seventeen hundred and twenty-eight pupils of both sexes. This held the rank of a good primary school.

4. The Orphan House, with one hundred boys, thirty-four girls, and ten overseers.

5. The Free Table, with six hundred and fifteen indigent scholars.

6. The Drug-Store and Book-Store, with fifty-three dependents.

7. The Institution for Women, with twenty-nine inmates.

The whole number of teachers, pupils, and dependents in the several institutions under Francke's direction amounted to four thousand two hundred and seventy-three.

Besides the direction of all these institutions, a work sufficient to overwhelm an ordinary man, Francke was active in other ways. His pastoral duties were faithfully performed; he founded a printing-office that sent forth before the close of the eighteenth century a million and a half of Bibles and a million copies of the New Testament; under the patronage of the King of Denmark, Frederick IV., he established a mission in India that continued over a hundred years. Through the teachers and ministers sent forth from his institutions, he reached all parts of Europe. Count Zinzendorf, the founder of the Moravian Brethren, was one of his pupils. As professor in the University of Halle, he was instru-

mental in effecting useful changes in the courses of study, and in elevating the moral tone of the body of students. He constantly sought their conversion and spiritual development. Theology became a matter of the heart as well as of the head. "A grain of living faith," Francke says, "is worth more than a pound of historic knowledge; and a drop of love, than an ocean of science."

The spirit that animated Francke in his vast enterprises is well worthy of our consideration. A profound personal piety lay at the basis of all his work. He founded his institutions with a firm reliance upon God, and depended upon prayer to bring him the necessary help. He regarded piety as the most essential thing in education. He emphasized the truth that education should have reference to the student's subsequent vocation; he increased the number of utilitarian studies, and laid the foundation of modern practical education.

In the following passages Francke expresses his views fully and clearly in regard to education: "Only the truly pious man," he says, "is a good member of society. Without sincere piety all knowledge, all prudence, all worldly culture is more hurtful than useful, and we are never secure against its misuse. Although all children are not depraved to the same degree, yet all bear the seed of depravity within them; and, hence, a fundamental improvement of the heart must always be labored for. In this work we must beware of fighting against some particular faults as if they were the only ones, although many deserve especial attention. Also, we must not lose sight of the peculiarities of each character, the differences of temperament. . . . Piety agrees with all

states and conditions into which man may come, for every condition with which it does not agree becomes by this very fact unlawful. It does not exclude prudence in conduct, but this must always be subordinated to godliness."

"Youth needs pleasure and recreation. This it finds partly in physical exercise, partly in pleasant and at the same time useful employments, especially in mechanical employments; partly in the examination of new and interesting objects of nature and art. In all instruction we must keep the pupil's station and future calling in mind, but to all classes alike is piety necessary. Hence, it must remain in all schools the chief matter, the principal lesson. In the instruction of those who are destined to unprofessional employments and trades, the most important thing after religion is an acquaintance with the indispensable arts of reading, writing, and reckoning; but the elements of other branches of knowledge should not be neglected, especially the elements of natural science, geography, history, and government, which, however, are to be brought forward incidentally and later."

The following rules are taken from Francke's instructions to his teachers upon the manner of exercising school-discipline. They exhibit his clear pedagogical insight, his piety, and his sympathy and love for children:

1. In exercising discipline, which is necessary and conformable to the will of God, the teacher should pray God first of all to give him the necessary wisdom.

2. As most teachers seek to correct children by rigorous punishment rather than by gaining their love through patience, forbearance, and affection; and, as

young teachers in particular are lacking in paternal solicitude and Christian gentleness, they ought to supplicate the Lord, without ceasing, to fill them with love for the young who are confided to them, and to deliver them from all harshness and carnal sufficiency.

3. The teacher should learn to govern himself, without which he can not properly govern others.

4. A teacher should maintain discipline over his pupils, and should exhort and punish them when necessary; nevertheless, education should not be hard and severe, but gentle and paternal.

5. A teacher ought never to punish a child in anger.

6. A teacher ought not to be ill-humored, but cordial and kind, like a father.

7. Children ought not to be punished for little faults inherent in their age, but should be encouraged to be more careful.

8. A Christian teacher should beware of becoming the occasion of disorder which he is to punish.

9. Children should not be abused with harsh epithets. It is contrary to the spirit of Christianity.

10. A child ought never to be scolded because it can not understand. If it is dull of comprehension, the teacher should redouble his efforts in its behalf.

11. A teacher should study the disposition of his pupils, as delicate and gentle natures are not to be treated like coarse and hardened natures.

12. In avoiding too great severity the teacher should not fall into the opposite extreme, and become the sport of the children.

13. With youth over fifteen years of age the teacher should abstain from harsh words, threats, and blows, by

which they may become embittered. It is better to take them separately, talk to them kindly—sometimes even pray with them. If these means are fruitless, let them be brought before the school board, or punished in the presence of a colleague.

Francke's long and useful life was crowned with a fitting close. He bore his last sickness with Christian resignation. The words of the patriarch Jacob were often upon his lips, "Lord, I wait for thy salvation." At the last hour his wife, the faithful companion of many years, stood by his side. "The Saviour will be with you," she said. "There is no doubt of it," he replied. These were his last words; and, in the midst of the hymns and prayers of assembled friends, he peacefully fell asleep June 8, 1727.

6. *ABSTRACT HUMAN EDUCATION.*

The eighteenth century witnessed a new movement which has been characterized as abstract human education.* In general, it ignores or rejects revealed religion, and bases its educational principles on the purely natural. Though as one-sided as the theological tendency, it has the great merit of stimulating a careful study of man in the interests of correct educational methods. In this way it rendered invaluable service to the cause of educational progress.

This movement exhibited two entirely different tendencies—the realistic tendency, which emphasized the study of Nature, and the humanistic tendency, which

* The German expression is "*abstract menschliche Erziehung*."

emphasized the study of words. Both of these tendencies, which had been in conflict to a greater or less degree during the preceding century, agreed in eliminating revealed religion from education.

This dual movement admits of an easy explanation. In the great process of human development extremes tend to beget extremes. The path of human progress is zigzag. Throughout the seventeenth century, which we have just considered, a mere formal religion remained in the ascendancy. It continued the controlling factor in education, in spite of the attacks of the pietists and educational reformers. It long thwarted the confident expectations of Comenius. But a religion, which has lost its vital power, can not hold a permanent ascendancy over the world. Its weakness exposes it to attack. A skeptical movement, known as Deism, arose in England, and gradually extended over the whole of Europe. Its principal tenets, as given by Kahnis, are the following: "Christianity is a positive religion, like Judaism and Mohammedanism. It is a prejudice which the Christians have, in common with the Jews and Mohammedans, to imagine that their religion is the only true one. That which separates these religions is the positive, but that is merely the unessential—the shell. In the main point, all positive religions are at one. This main point is natural religion—the religion of sound common sense." Deism rejected the supernatural in religion. As its principles had no other than a speculative basis, they were lacking in certainty and authority, and in many cases prepared the way for the grossest atheism. From the deistic or skeptical stand-point the current education of the time, unduly controlled by nar-

row ecclesiastical influences, was judged defective. Educational reformers representing the skeptical tendency arose, and new movements were inaugurated.

(A.) ROUSSEAU.

There are few men who have exerted a greater influence upon education than the celebrated author, Jean-Jacques Rousseau. He was born at Geneva, in 1712, the son of a poor watchmaker. As a child he was feeble in body and shy in disposition, but at the same time he was endowed with remarkable vivacity in thought and feeling. He was exceedingly fond of reading, in which he was encouraged by his father; and, among other works, many of which were worthless, he early devoured Bossuet, Ovid, and Plutarch. "Thus began to be formed within me," he says, "that heart, at once so proud and so tender, that effeminate but yet indomitable character which, ever oscillating between weakness and courage, between indulgence and virtue, has to the last placed me in contradiction with myself, and has brought it to pass that abstinence and enjoyment, pleasure and wisdom, have alike eluded me."

It is not worth while to follow him through the unimportant events of his life. His boyhood was by no means worthy of imitation; and in his "Confessions," a work written with the utmost frankness late in life, he does not attempt to conceal theft and lying. He ran away from an engraver to whom he had been apprenticed, and during the remainder of his life he was a wanderer who enjoyed but temporary seasons of repose. Throughout his career he was subject to petty misfortunes and persecutions, but his immoralities repress our

sympathy for his sufferings and lessen our admiration for his genius. His life was a singular paradox. "There is in our literary history," says an interesting French author, "a celebrated writer who offers the singular combination of grandeur in his works and of baseness in his conduct; it is Jean-Jacques Rousseau. Full of enthusiasm for the beautiful and the good, he defended with invincible logic and passionate eloquence the eternal principles of justice and morality, and he committed the most shameful and culpable acts. This man, who wrote admirable pages upon domestic affection, friendship, and gratitude, chose a companion unworthy of him, placed his children in a foundling hospital, and showed himself unjust and harsh toward his friends, and ungrateful toward his benefactors. And all the time doing wrong, he believed himself moral, because he loved virtue. 'I do evil,' he said, 'but I love good. My heart is pure.'"

Rousseau has exerted his influence upon education through a single work, half treatise and half romance. It is, as he himself says, "a collection of thoughts and observations, without order and almost without connection." It is entitled "*Émile, or concerning Education*." In many respects a radical book, it is flung defiantly in the face of prevalent usage. "Go directly contrary to custom," he says, "and you will nearly always be right." The work abounds in mingled truth and error, and needs to be read with great discrimination; but many of its truths are fundamental, and ever since their publication they have been gradually forcing an entrance into educational practice. "Not Rousseau's individual rules," says the great German Richter, "many of which may

be erroneous without injury to the whole, but the spirit of education which fills and animates the work has shaken to their foundations and purified all the school-rooms, and even the nurseries in Europe. In no previous work on education was the ideal so richly and beautifully combined with actual observation as in his."

Rousseau was largely indebted to his predecessors, especially to Locke, whom he frequently quotes. The two fundamental truths which have perhaps exerted the widest influence are these: 1. Nature is to be studied and followed. 2. Education is an unbroken unity, extending from early childhood to maturity. It is true that both of these principles had been advocated by Comenius, but it was through the charm of Rousseau's work that they made the widest impression upon the educational thinking of Europe. Along with positions wholly indefensible, Rousseau urges, in admirable style, many of the reforms with which we are already familiar, and which have won our hearty approval. His standpoint, as presented in the opening paragraph of "*Émile*," is undoubtedly wrong. "Everything is good," he says, "as it comes from the hands of the Creator; everything degenerates in the hands of man. He forces one country to bring forth the productions of another; one tree to bear the fruits of another; he mingles and confuses climates, elements, seasons; he mutilates his dog, his horse, his slave; he overturns everything, he disfigures everything; he loves deformity, monsters; he wishes nothing as Nature has made it, not even man; it is necessary to train him like a riding-horse; to conform him to a model like a tree in the garden."

Rousseau is thus seen to be hostile to the established

order of things. Society at the French capital had become exceedingly artificial and corrupt. Its shallow conventionalities and irrational customs irritated Rousseau, and with an exaggeration natural to him he made society at large the object of indiscriminate attack. He maintains that civilization fosters vice, that the arts and sciences have been born of sin, and hence he seeks a sovereign remedy for existing evils in a return to a state of nature. "Rousseau did not understand," says Paroz, "or rather he did not believe, that the evil reigning among mankind was anterior to civilization, and that civilization is dangerous only as it departs from the vivifying and elevating principles of Christianity. It is from the heart, and not from civilization, that the bad thoughts and bad actions which trouble humanity have their issue; and to elevate man we need a principle which renews and changes the heart. Every other means is insufficient; after having taken civilization from man to keep him from doing evil, it would still be necessary to deprive him of his limbs, and at last of life itself."

With the intention of following Nature, Rousseau carries *Émile*, his hero, through five periods of development: the first embraces his infancy, the second extends to his twelfth year, the third to his fifteenth, the fourth to his twentieth, and the fifth includes his marriage. To each of these periods a book is devoted, setting forth the matter and method of training in detail.

Rousseau maintained that child-nature should be investigated as the basis of all correct training. "People," he says, "do not understand childhood. With the false notions we have of it, the further we go the more we blunder. The wisest apply themselves to what it is im-

portant for men to know without considering what children are in a condition to learn. They are always seeking the man in the child, without reflecting what he is before he can be a man." "Nature," he says again, "requires children to be children before they are men. If we wish to pervert this order, we shall produce forward fruits, having neither ripeness nor taste, and certain soon to decay; we shall have young professors and old children. Childhood has its manner of seeing, perceiving, and thinking peculiar to itself; nothing is more absurd than our being anxious to substitute our own in its stead."

The period of childhood should be devoted to physical development and the training of the senses. "The child must learn," says Rousseau, "to feel the warmth and coldness, the hardness, softness, and weight of bodies; to judge of their figure, magnitude, and other sensible qualities, by seeing, touching, hearing, and particularly by comparing the sight with the touch, and judging, by means of the eye, of the sensation which objects would make upon the fingers." ✓

Rousseau emphasized the importance of a knowledge of things as contrasted with a knowledge of words. "The abuse of books," he says, "is destructive to knowledge. Imagining ourselves to know everything we read we believe ourselves released from learning it. Too much reading serves only to make us presumptuous blockheads. Of all the ages in which literature has flourished, reading was never so universal as in the present, nor were men in general ever so ignorant."

Rousseau holds to the developing idea in education,

and assails the practice of imparting knowledge to the passive pupil by the weight of authority. "Another advantage," he says, "resulting from this method of learning for ourselves is, that we do not accustom ourselves to a servile submission to the authority of others ; but, by exercising our reason, grow every day more ingenious in the discovery of the relation of things, in connecting our ideas and inventing instruments ; whereas, by adopting all that is told us, the mind grows dull and indifferent, as a man, who is always dressed and served by his servants and drawn by his horses, loses at length the activity and use of his limbs."

The end of education is to develop a complete man. "In the order of Nature," says Rousseau, "all men are equal, their common vocation is the estate of man ; and whoever is well brought up for that will not fail in anything belonging to it. It is a matter of little importance to me whether my pupil be destined for arms, for the Church, or for the bar. Before the vocation assigned him by his parents, Nature calls him to human life. To live is the business I wish to teach him. When he leaves my hands I acknowledge that he will be neither magistrate, soldier, nor priest ; he will be first of all a man—all that a man ought to be he can be ; and, though fortune change, he will be prepared for every condition."

With regard to female education, Rousseau's views were not broad. "All the education of women," he says, "ought to be relative to men. To please them, to make themselves loved by them, to bring them up when they are little, to care for them when they are grown up, to counsel them, to console them, to render their

lives agreeable and pleasant—such have been the duties of women in all ages.”

It is difficult to resist the temptation unduly to multiply quotations from this brilliant book. But we conclude our study with the well-known and beautiful tribute which Rousseau, deist though he was, pays to Christ and his gospel. “I confess also,” he says, “that the majesty of the Scriptures astonishes me, that the purity of the gospel speaks to my heart. Look at the books of the philosophers, with all their pomp; how insignificant in comparison with it! Is it possible that a book at once so sublime and so simple is the work of men? Is it possible that he whose history it contains is himself only a man? Is that the tone of an enthusiast or ambitious sectary? What gentleness, what purity in his manners! What touching grace in his instructions! What elevation in his maxims! What profound wisdom in his discourses! What presence of mind, what delicacy and justice in his replies! What control over his passions! Where is the man, where is the philosopher, that knows how to live, suffer, and die without weakness and ostentation? . . . The death of Socrates, philosophizing tranquilly with his friends, is the most desirable that can be wished; that of Jesus expiring in agony, insulted, jeered, cursed by a whole people, is the most horrible that can be feared. Socrates, as he took the poisoned cup, blessed him that tearfully presented it; Jesus, in the midst of a terrible punishment, prays for his unrelenting executioners. Yes, if the life and death of Socrates are those of a philosopher, the life and death of Jesus are those of a God!”

(B.) THE PHILANTHROPIN.

Rousseau was only a theorizer in education. He did not undertake to put his views into practice. This was left for a group of educators who, from the name of the first school, are known in educational history as philanthropinists. Most prominent of these were Basedow, Salzman, and Campe. Recognizing the defects of existing schools, they all sought to carry out practically the reforms proposed by Comenius, Locke, and above all by Rousseau. In this undertaking they had the sympathy of a number of eminent men, among whom the philosopher Kant deserves especial mention.

The current training of children has been thus portrayed by Raumer: "Youth was then, for most children, a sorrowful period; the instruction hard and heartlessly severe. Grammar was beat into the memory, and likewise portions of Scripture and poetry. A common punishment at school was to learn by heart the one hundred and nineteenth Psalm. School-rooms were gloomily dark. No one thought that youth could find pleasure in work, or that they had eyes for anything but reading and writing. The profligate age of Louis XIV. imposed upon the poor children of the higher classes hair curled by the barber and smeared with powder and pomade, braided coats, knee-breeches, silk stockings, and a dagger at the side—for active, lively children the severest torture."

The philanthropinists set themselves against these evils. The key-note of their system was *everything according to nature*. Some of its fundamental ideas, evidently drawn from Rousseau's work, are thus set forth

by Basedow: "You should attend to nature in your children far more than to art. The elegant manners and usages of the world are, for the most part, contrary to nature. These come of themselves in later years. Treat children like children, that they may remain the longer uncorrupted. A boy, whose acutest faculties are his senses, and who has no perception of anything abstract, must first of all be made acquainted with the world as it presents itself to the senses. Let this be shown him in Nature itself, or, where this is impossible, in faithful drawings and models. He can thus, even in play, learn how the various objects are named. Comenius alone has pointed out the right road in this matter. By all means reduce the wretched exercises of the memory."

Basedow, as the founder of the Philanthropin, is worthy of some consideration. He was born at Hamburg, in 1723. His youth was somewhat irregular. He studied theology at Leipsic, but his skeptical views prevented his ordination to the ministry. He turned to teaching. Having advocated educational reform in a work published in 1771, from which the extract above is taken, he was received under the patronage of the Prince of Dessau, and placed in charge of a school in which he was to exemplify his theories. His purpose is announced in the following appeal made in 1776, two years after the founding of the Philanthropin. "Send your children," he says, "to a happy youthful life in successful studies. This affair is not Catholic, Lutheran, or Reformed, but Christian. . . . We are philanthropists, or cosmopolites. The sovereignty of Russia or Denmark is not, in our teaching and judgment, placed

after the freedom of Switzerland. . . . The end of education must be to form the European, whose life may be as harmless, useful, and contented as education can make it. It must, therefore, be provided (1) that little vexation, pain, and disease await him, and (2) that he accustom himself to the careful enjoyment of the good. . . . The art of all arts is virtue and contentment. But few exercises for the virtues, as they should be employed in education, have yet been invented. Hear, ye wise and philanthropic authors! A plan for the methodical exercise of the virtues in families and schools is one of the few weighty books to benefit all mankind. If we were rich, we would offer a prize of ten thousand dollars for the best book of this kind appearing within two years.

“For the paternal religion of each pupil, the clergy of the place will provide; but natural religion and morality is the chief part of philosophy, which we will see to ourselves. In the Philanthropin faith in God as the Creator, Preserver, and Lord of the universe is first inculcated. . . . Little memorizing is done with us. The pupils are not forced to study, not even by reproof. Yet we promise, by the excellence of our method and its agreement with the philanthropinistic education and mode of life, to make double the progress in study that is common in schools and gymnasia. And especially do we promise much culture of sound reason through the use of a truly philosophical mode of thinking.”

The following extract, taken from an account of a visit to the Philanthropin, will give us some idea of the novelty and freedom of the methods pursued. The pupils were plainly dressed; their hair was cut short; their

throats were quite open, the shirt-collar falling back over the coat. "The little ones," says the writer of the account in question, "have gone through the oddest performances. They play at 'word-of-command.' Eight or ten stand in a line like soldiers, and Herr Wolke * is officer. He gives the word in Latin, and they must do whatsoever he says. For instance, when he says, '*Claudite oculos,*' they all shut their eyes; when he says, '*Circumspicite,*' they look about them; '*Imitamini sartorem,*' they all sew like tailors; '*Imitamini suto-rem,*' they draw the waxed thread like the cobblers. Herr Wolke gives a thousand different commands in the drollest fashion.

"Another game, 'the hiding-game,' I will teach you. Some one writes a name and hides it from the children—the name of some part of the body, or of a plant, or animal, or metal—and the children guess what it is. Whoever guesses right gets an apple or a piece of cake. One of the visitors wrote *intestina*, and told the children it was a part of the body. Then the guessing began. One guessed *caput*, another *nasus*, another *os*, another *manus*, *pes*, *digiti*, *pectus*, and so forth, for a long time; but one of them hit it at last. Next Herr Wolke wrote the name of a beast, a quadruped. Then came the guesses—*leo*, *ursus*, *camelus*, *elephas*, and so on, till one guessed right; it was *mus*. Then a town was written, and they guessed Lisbon, Madrid, Paris, London, till a child won with St. Petersburg.

"They had another game, which was this: Herr Wolke gave the command in Latin, and they imitated the noises of different animals, and made us laugh till

* One of Basedow's assistants.

we were tired. They roared like lions, crowed like cocks, mewed like cats, just as they were bid."

The Philanthropin acquired a wide reputation, and it was visited by persons interested in education from various parts of Europe. The impression generally made was favorable, yet the results somehow did not answer to Basedow's confident manifesto. It seems that he himself was poorly adapted to carry on such an institution. His methods, well suited to young children, were prolonged into the period when more advanced and more systematic work should have been done. His teaching did not keep pace with the development of his pupils, and hence failed to fulfill the promise it had made in the beginning. The Philanthropin, which had naturally many opponents, was closed before the end of the century, yet not without leaving several similar institutions to survive it, through which it continued to exert a salutary influence upon education.

Kant, who had at first predicted great results from the Philanthropin, was sadly disappointed; and in his "Pädagogik" he refers to it in an interesting passage. "One fancies indeed," he says, "that experiments in education would not be necessary, and that we might judge by the understanding whether any plan would turn out well or ill. But this is a great mistake. Experience shows that often in our experiments we get quite opposite results from what we had anticipated. We see, too, that, since experiments are necessary, it is not in the power of one generation to form a complete plan of education. The only experimental school which, to some extent, made a beginning in clearing the road was the Institute at Dessau. This praise at least must

be allowed it, notwithstanding the many faults which could be brought up against it—faults which are sure to show themselves when we come to the results of our experiments, and which merely prove that fresh experiments are necessary. It was the only school in which the teachers had liberty to work according to their own methods and schemes, and where they were in free communication both among themselves and with all learned men throughout Germany.”

(C.) THE HUMANISTS.

It is now time to consider the humanistic movement of the eighteenth century, which made the study of classical antiquity the basis of all culture. It was a reaction in part against the ecclesiasticism which fostered the ancient languages only for the sake of theology, and in part against the realistic school represented by Comenius, Rousseau, and especially the philanthropinists.

The distinguishing characteristic of the humanists is the prominence which they give to Latin and Greek. These languages are made the basis of education; and the attempt is made to justify this prominence by their value as a means of culture, and also as studies of practical utility. It is maintained that the study of the ancient languages is unequaled in disciplinary worth, and that the literatures of Greece and Rome contain incomparable models of style. Hence, the study of Latin and Greek gives strength to the faculties and cultivation to the taste. It is further claimed that the study of Latin and Greek possesses great practical worth, inasmuch as it furnishes a valuable acquaintance with English etymology and general grammar, leads to a vast storehouse

of knowledge, and gives a better understanding of the present, which has its roots in the past. The humanists are unsympathetic with the present; they depreciate the science, literature, and culture of modern times, and scarcely allow to Christian civilization any superiority over that of paganism in literary productions.

The fundamental principles of the humanists have been given by Karl Schmidt: "1. The ancient languages are the foundation of all true culture; a knowledge of them makes the scholar; hence they must lie at the basis of all instruction, especially in the higher education. In itself considered, the study of language is a means of mental culture, and hence has disciplinary value. But it is also related to all departments of human learning. Greek and Latin writings are the sources of all learning, and whoever would go to the fountain-head must be acquainted with these languages. The original documents of religion, Roman jurisprudence, the correct principles of medicine, philosophy, the principles and examples of rhetoric and poetry, history—all have come to us from Greece and Rome. . . . 2. The study of grammar must precede that of philosophy, history, æsthetics. Grammar is necessary to a thorough knowledge of language. The method used in teaching the modern languages does not suit with the ancient languages. A dead language is well spoken only by a few. This ability is far from being possessed by all good philologists. . . . 3. A too early pursuit of the natural sciences is unfavorable to a thorough acquisition of languages, for the time given to the latter must be brief and dependent—adequate studies in them being deferred to riper years. The languages belong to the

schools, the sciences to the universities. 4. It is a mistake to suppose that the study of the ancient languages is hurtful to practical knowledge. The broadest scholars have the greatest respect for the ancients. It is not easy to name, in any nation, a distinguished author or scholar who is not indebted to the Greeks and Romans for his superior attainments. The too early pursuit of all possible sciences at school results in shallow minds that are thorough in nothing. There is no thorough, scientific culture apart from the study of language."

The contrast between humanism and philanthropinism has been sharply drawn by Niethammer, a prominent humanist of the latter part of the eighteenth century:

1. Humanism aims at general culture; philanthropinism, at utility. 2. Humanism seeks to exercise and strengthen the mind; philanthropinism, to fill it with useful knowledge. 3. Humanism demands but few subjects of study; philanthropinism, many. 4. Humanism exercises the mind with ideas; philanthropinism, with things. 5. Humanism deals with the true, the beautiful, and the good, the elements of human culture; philanthropinism, with matter. 6. Humanism finds its subjects of study in classical antiquity; philanthropinism, in the present. 7. Humanism regards learning as a serious employment; philanthropinism makes it, as far as possible, an amusement. 8. Humanism leads to thoroughness in a few things; philanthropinism, to superficiality in many. 9. Humanism cultivates the memory, the repository of knowledge; philanthropinism neglects it.

The leading representatives of the humanistic tendency in the eighteenth century were Gesner, Heyne, Ernesti, and Wolf. They pursued the study of the an-

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 cient classics with great enthusiasm and success, and succeeded in giving Greek a place by the side of Latin in the higher education. They raised Germany to the leadership in classical learning—a position it has held ever since. The college curriculum of England and America has been largely influenced by the humanists. Their influence has been in the ascendant for a century, and it is only within the past few years that a strong reaction has set in and forced a partial readjustment of the college course. The fundamental principles of humanism have been brought into question, and subjected to both scientific and practical tests. Many of them are found to be in part or wholly fallacious. Our knowledge of the ancient world is not dependent upon an acquaintance with Latin and Greek. It is best obtained in the exhaustive labors of great historians who have embodied the results of their investigations in our own and other modern tongues. The treasures of ancient literature—the immortal works of Virgil and Homer, of Cicero and Demosthenes, of Horace and Æschylus—are accessible in scholarly translations, which we can read with the same satisfaction we enjoy in perusing the records of Moses, the songs of David, or the arguments of Paul. And the knowledge thus gained of ancient authors is far more satisfactory than that obtained by college-students, who struggle through inconsiderable fragments with grammar and dictionary. While there may be question as to the comparative excellence of style in ancient and modern writing, it is a fact beyond reasonable doubt that the vast extension of the field of knowledge in modern times—the development of science, the marvels of invention, the truths of Christianity—has made the

literature of the past two hundred and fifty years greatly more valuable than that of antiquity. The current of thought, like a river, grows broader and deeper as it flows farther from its source. In view of the fact that the ancient languages are not the parents of German and English, but rather elder children of the same Aryan family, it is coming to be recognized that Latin and Greek have no monopoly of general grammar, and that the principles underlying the structure of language can be readily learned from the modern tongues. As the modern languages are not necessarily subject to the abuse of illegitimate helps, and as they call into active exercise every faculty of the student's mind in the three-fold work of translating, speaking, and hearing, they do not appear to be at all inferior to the ancient languages as disciplinary studies.

It is now felt, too, that the modern world, in which we are to play our parts, should not be ignored in our courses of instruction. Considered in its external relations, the end of education is to prepare us for useful living. Great nations are moving upon the stage of the nineteenth century; investigators are at work in all Christian lands; international relations are becoming closer each year; the whole earth, bound together by telegraphs and commercial interests, daily challenges our thought. In view of these facts, many hold that it is not wise to require a young man to spend his best years in Greece and Rome as a preparation for intelligent living in the nineteenth century—the grandest that the world has seen. It leaves too large a gap between the college and practical life. Hence Latin and Greek, notwithstanding the stubborn resistance of the humanists, are being gradu- ✓

ally retired from their former prominence to make way for the mother-tongue, the natural sciences, and the modern languages.

7. *EDUCATION IN THE NINETEENTH CENTURY.*

We stand at the opening of the nineteenth century, which has gathered within its embrace the fruits of all the labors, struggles, and sufferings of the past. The field of knowledge has not only been widened, but it has been brought within the reach of the masses. Mighty forces of Nature have been brought into subjection to the will of man, and are made obedient servants in the cause of progress. The seeds of human liberty, sown in blood at the close of the last century, have sprung up into a beautiful harvest. The gospel has been disseminated throughout nearly the whole world. The sentiment of humanity has been awakened, and a serious calamity in any quarter instantly awakens a general and fruitful sympathy. Reason is asserting its rights in society and state, in science and art, while the law of love is more and more prevailing in all the relations of life.

(A.) PESTALOZZI.

At the threshold of this century stands an educator who commands both our admiration and love. In the long line of educational reformers since the Reformation there is perhaps no other that has done so much for popular education. The devotion of his life, as well as the truth of his pedagogic principles, has been a power in the educational world. He was not distinguished for

learning or ability; his were the higher talents of a noble enthusiasm for the elevation of our race, and an inexhaustible love for man. Following the example of our divine Master, he gave himself for the good of others. His labors and self-sacrifices were not in vain. Through the noble devotion of his endeavors, he became the medium through which all that was best in educational theory up to his time obtained permanent recognition. This great educator was John Henry Pestalozzi. ✓

The labors of previous educational reformers were not altogether fruitless. Here and there might be discerned improvement in the schools. Some enlightened rulers directed their attention to the subject of popular education; and, as early as 1717, Frederick William I. of Prussia published an edict of compulsory education. But, in general, it may be said that the primary schools ✓ of the eighteenth century remained in a wretched condition. The teachers were unsuccessful students, disabled workmen, discharged soldiers, and common servants. They were held in light esteem, and received but little pay. Schools were by no means general, and those that were opened were not regularly attended. The common people were lacking in educational interest, and looked upon the schools as a burden. While the clergy generally regarded themselves as the legitimate ✓ custodians of education, they paid no adequate attention to its interests. Many princes, believing that general intelligence would increase the difficulty of ruling, were unfavorable to the education of the masses. A vast work yet remained to be accomplished. ✓

Pestalozzi, who was to contribute so largely to this work, was born January 12, 1746, in the beautiful town

of Zürich. At six years of age he lost his father. His mother was an excellent woman, but her tenderness was unfavorable to the development of strength of character. "I grew up," he says, "by the side of the best of mothers, as a mother's child. Year after year I never came out from behind the stove. In short, all means and stimulus for the development of manly strength, manly experience, manly ways of thinking, and manly practice, were wanting to me just in proportion as I needed them by the peculiarity and weakness of my individual character."

He did not distinguish himself at school; on the contrary, he became the butt of fun for his companions. "In all games," he says, "I was the most awkward and most helpless of all my schoolmates, and yet I wished to excel in them above the rest. That often gave them occasion to laugh at me. One of them gave me the nickname of Harry Queer, of Follyville. Most of them were pleased with my good temper and serviceableness, but they knew my one-sidedness and want of skill, and my thoughtlessness in everything which did not interest me much."

His feelings were very strong. This fact, which was at the same time a source of weakness and of strength, is illustrated by the following anecdote: "When he was once in great pecuniary distress, and his family were without the necessaries of life, he went to the house of a friend and borrowed a sum of money. On his way home he fell in with a peasant, who was lamenting the loss of a cow. Carried away as usual by his feelings, Pestalozzi gave the man all the money he had borrowed, and ran away to escape his thanks."

He was thoroughly injudicious. This fact was understood by an intimate friend named Bluntschli, who upon his death-bed gave Pestalozzi, then a young man, the following advice: "I die," he said; "and, when you are left to yourself, I warn you never to embark in any career which, from your good-natured and confiding disposition, might become dangerous to you. Seek for a quiet, tranquil career; and, unless you have at your side a man who will faithfully assist you with a calm, dispassionate knowledge of men and things, by no means embark in any extensive undertaking, the failure of which would in any way be perilous to you."

Pestalozzi first studied theology, but, breaking down in his first sermon, he gave up the ministry for law. To this pursuit he did not long remain constant. In 1767 he purchased a farm of about one hundred acres, to which he gave the name Neuhof, and turned his attention to agriculture. As might be expected from what we already know of his character, the enterprise was a failure. At an earlier period he had perused Rousseau's "Émile," which made a profound impression upon him. Unmindful of his own financial embarrassment, moved by sympathy for the suffering ones around him, he opened an industrial school for the poor. He soon had fifty children under his charge to provide for. His plan was to combine study with remunerative labor. But after five years the school was closed, in 1780, leaving Pestalozzi heavily involved in debt, but greatly enriched in educational experience. This was his consolation: "The Christian in the strength of faith and love," he says, "considers his property not as a gift but as a trust,

which has been committed to his hand, that he may use it for the good of others."

The next few years were devoted chiefly to authorship as a means of obtaining subsistence. He produced several works in which he advanced his educational ideas, and through which he has exerted a lasting influence upon education. But we follow him in his work as a practical educator. In 1798 Stanz, a town on Lake
) Lucerne, was burned by the French. The whole surrounding district was laid waste, and a number of orphans were left destitute and homeless. Upon the recommendation of the Swiss directors, Pestalozzi went thither to look after them. With only one servant he established himself in an unfinished convent, and soon had eighty children under his care. They composed a heterogeneous mass that would have been appalling to any one with less enthusiasm than Pestalozzi. He addressed himself with almost superhuman zeal to the work of improving their condition. "Every assistance," he says, "everything done for them in their need, all the teaching that they received, came directly from me; my hand lay on their hand, my eye rested on their eye. My tears flowed with theirs, and my smile accompanied theirs. Their food was mine, and their drink was mine. I had nothing, no housekeeping, no friends, no servants; I had them alone. I slept in their midst; I was the last to go to bed at night, and the first to rise in the morning. I prayed with them, and taught them in bed before they went to sleep." This is an unselfish devotion that makes us forget many defects of character.

"His school-room," says a biographer, "was totally unprovided with books, and his apparatus consisted of

himself and his pupils. He was forced to adapt these means to the accomplishment of his end. He directed his whole attention to those natural elements which are found in the mind of every child. He taught numbers instead of figures; living sounds instead of dead characters; deeds of faith and love instead of abstruse creeds; substance instead of shadow; realities instead of signs."

In the space of a few months Pestalozzi wrought a great change in the physical, mental, and moral condition of his pupils. They no longer seemed the same beings. The high hopes of the noble enthusiast, however, were again doomed to disappointment. In less than a year the French army returned to Stanz, and unceremoniously took possession of the convent. No choice was left Pestalozzi. He was obliged to relinquish his labors, and parted from his children with tears and sobs. "Imagine," he writes to a friend, "with what sensations I left Stanz. Thus might feel a shipwrecked mariner, who sees land after weary and restless nights, and draws the breath of coming life, but is again thrown into the immensity of space. This was my own condition. Think of the fullness of my heart, the greatness of my plans, my success and my ruin, the trembling of my disordered nerves, and my mute agony."

In the course of a few weeks he entered a school at Burgdorf as assistant teacher. He carried with him his old enthusiasm and his old disregard for stereotyped methods. Ramsauer, then a pupil in the school and afterward a faithful assistant of Pestalozzi's, has given us an account of the Burgdorf school. He says: "I got about as much regular schooling as the other scholars—which, in fact, was none at all; but Pestalozzi's sacred

zeal, his devoted love, which caused him to be entirely unmindful of himself, his serious and depressed state of mind, which struck even the children, made the deepest impression on me, and knit my child-like and grateful heart to his forever." Though he was the subject of envy and intrigue, Pestalozzi's labors at Burgdorf were not left wholly without recognition. The school committee of that town expressed themselves in a report as follows: "He has shown what powers are hidden in the feeble child, and in what manner they can be developed. The pupils have made astonishing progress in some branches, thereby proving that every child is capable of doing something, if the teacher is able to draw out his talent, and awaken the powers of his mind in the order of their natural development."

In 1805 he opened a school at Yverdun. Here he attained his greatest triumphs. He achieved a European reputation, and kings and philosophers united in showing him regard. Yverdun became a place of pilgrimage for philanthropists and educators from all parts of Europe. In 1809 Pestalozzi had under him fifteen teachers and one hundred and sixty-five pupils, besides thirty-five adult students, who were there to learn his methods. The spirit animating the institution has thus been described by an eye-witness: "The teachers and pupils were united by that unaffected love which Pestalozzi, who in years was a man verging on the grave, but in heart and mind a genuine child, seemed to breathe out continually and impart to all who came within his influence. The children forgot that they had another home, and the teachers that there was any other world than the institution. Not a man claimed a privilege for him-

self, not one wished to be considered above others. Teachers and pupils were entirely united. They not only slept in the same rooms, and shared the labors and enjoyments of the day, but they were on a footing of perfect equality. The same man who read a lecture on history one hour would, perhaps, during the next sit on the same form with the pupils for a lesson in arithmetic or geometry, and without compromising his dignity would even request their assistance and receive their hints."

In reference to his work here, Pestalozzi himself writes: "The difficulties that opposed my enterprise in the beginning were very great. Public opinion was wholly against me. Thousands looked upon my work as quackery, and nearly all who believed themselves competent judges declared it worthless. Some condemned it as silly mechanism; some looked upon it as mere memorizing, while others contended that it neglected the memory for the sake of the understanding; some accused me of a want of religion, and others of revolutionizing intentions. But, thank God, all these objections have been overcome. The children of our institution are full of joy and happiness; their innocence is guarded; their religious feelings are fostered; their minds are cultivated; their knowledge increased; their hearts inspired with a love of virtue. The whole is pervaded by the great spirit of home-union; a pure fatherly and brotherly spirit rules all. The children feel free; their activity is incited by their occupations; affection and confidence elevate and guide their hearts."

In the midst of his success, Pestalozzi still retained his touching simplicity and self-forgetfulness. On one

occasion "a poor young man had traveled on foot a long distance to pay his tribute of respect and admiration to Pestalozzi; but, upon arriving at Yverdun, he found himself so reduced that he could not pay for a night's lodging at the hotel. Pestalozzi, not wishing to disturb the household, offered his own bed to the wearied guest. Some friends, calling at his room soon after, were astonished to see his bed occupied by a stranger. Alarmed by his absence they went in search of him, and found him at last stretched on one of the hard benches of the school-room in sound sleep, and totally unconscious that he had done anything but his duty."

At Yverdun Pestalozzi lost, in 1815, the noble wife who had stood faithfully by his side through the labors and trials of nearly fifty years. At the burial, Pestalozzi, turning to the coffin, said with great tenderness: "We were shunned and despised by all; sickness and poverty bowed us down, and we ate dry bread with tears. What was it that in those days of severe trial gave you and me strength to persevere and not lose hope?" Then laying a Bible on the breast of the departed, he continued: "From this source you and I drew courage and strength and peace."

The sun of Pestalozzi's life, which had shone brightly for a little while in the afternoon, was to set in clouds. Discord broke out at length among the teachers at Yverdun. After disturbing the peace and prosperity of the school for a long time, it led at last, in 1825, to its suspension. Pestalozzi returned to Neuhof, where he was prostrated with a fever. He died February 17, 1827. During his last hours he said: "I forgive my enemies; may they find peace, now that I go to my rest. I should

have been glad to live another month, in order to complete my last work; but I also thank God for calling me away from this life. My beloved family, remain attached to one another, and seek your happiness in the quietness of your domestic circle." Subject to disappointment all his days, his life was still a great triumph. It was spent in unselfish devotion to the good of others; and, like that of the blessed Master who went about doing good, it has borne a rich fruitage for the world.

The object of our study thus far has been chiefly to gain a clear knowledge of the man. We now turn to a brief examination of some of his educational principles, as embodied in his leading works, viz.: "Evening Hour of a Hermit," "Leonard and Gertrude," and "How Gertrude teaches her Children." He rejected the current humanistic word-teaching. "A man," he says, "who has only word-wisdom is less susceptible to the truth than a savage. The use of mere words produces men who believe that they have reached the goal, because their whole life has been spent in talking about it, but who never ran toward it, because no motive impelled them to make the effort; hence, I come to the conviction that the fundamental error—the blind use of words in matters of instruction—must be extirpated before it is possible to resuscitate life and truth."

The educational conception that lies at the basis of Pestalozzi's system is that of a natural, progressive, and symmetrical development of all the powers and faculties of the human being. This is the completest and grandest conception of education. "Sound education," says Pestalozzi, "stands before me symbolized by a tree planted near fertilizing waters. A little seed, which ✓

contains the design of the tree, its form and proportions, is placed in the soil. See how it germinates and expands into trunk, branches, leaves, flowers, and fruit! The whole tree is an uninterrupted chain of organic parts, the plan of which existed in its seed and root. Man is similar to the tree. In the new-born child are hidden those faculties which are to unfold during life. The individual and separate organs of his being form themselves gradually into an harmonic whole, and build up humanity in the image of God."

Pestalozzi beautifully emphasizes in reference to the higher exercises of the mind the principle of Comenius that "things to be done should be learned by doing them." "The moral, intellectual, and executive powers of man," he says, "must be nurtured within himself, and not from artificial substitutes. Thus, faith must be cultivated by our own act of believing, not by reasoning about faith; love, by our own act of loving, not by fine words about love; thought, by our own act of thinking, not by merely appropriating the thoughts of other men; and knowledge, by our own investigation, not by endless talk about the results of art and science."

A natural order is to be observed in education. "Men, fathers!" Pestalozzi exclaims, "force not the faculties of your children into paths too distant before they have attained strength by exercise, and avoid harshness and over-fatigue. When this right order of proceedings is anticipated, the faculties of the mind are weakened and lose their steadiness, and the equipoise of their structure. This you do when, before making them sensitive to truth and wisdom by the real knowledge of actual objects, you engage them in the thousand-fold

confusions of word-learning and opinions; and lay the foundation of their mental character and of the first determination of their powers, instead of truth and actual objects, with sounds and speech—and words.”

The fundamental principles of Pestalozzi, most of which are contained in the extracts already given from his writings, have been summarized by Payne substantially as follows:

1. The principles of education are to be sought in human nature.

2. This nature is organic, consisting of physical, intellectual, and moral capabilities, ready and struggling to develop themselves.

3. The function of the educator is both negative and positive. He must remove impediments to the learner's development, and he must also stimulate the exercise of his powers.

4. Self-development begins with sensations received through the senses. These sensations lead to perceptions which, registered in the mind as conceptions or ideas, constitute the basis of knowledge.

5. “Spontaneity and self-activity are the necessary conditions under which the mind educates itself, and gains power and independence.”

6. Practical aptness depends more on exercise than on knowledge. “Knowing and doing must, however, proceed together. The chief aim of education is the development of the learner's powers.”

7. All education must be based on the learner's own observation—on his own personal experience. “This is the true basis of all knowledge. The opposite proceeding leads to empty, hollow, delusive word-knowledge.

First the reality, then the symbol; first the thing, then the word."

8. What the learner has gained by his own observation has become an actual possession which he can explain or describe in his own words. His ability to do this is the measure of the accuracy and extent of his knowledge.

9. The learner's growth necessitates advancement from the near and actual to the more remote; hence, from the concrete to the abstract, from particulars to generals, from the known to the unknown.

With this summary of principles, which are gradually permeating and changing modern education, we leave Pestalozzi, whom, notwithstanding his imperfections, we can not help loving. And this is the highest tribute which one being, whether human or divine, can pay another.

(B.) FROEBEL AND THE KINDERGARTEN.

One of the most illustrious disciples of Pestalozzi was Frederick Froebel, who was born in Thuringia, in 1782. He was the son of a Lutheran clergyman, who was so occupied in caring for a large parish that he neglected his son. Having early lost his mother, he was intrusted to the care of a maid-servant, who exercised as little oversight as possible. The step-mother, that came into the house in his fourth year, became gradually estranged from him, and filled his young heart with grief.

In due time he entered the village school to receive his rudimentary education. The religious instruction he here received made a deep impression. The older

pupils were required to repeat to the younger ones some text of Scripture occurring in the sermon on Sunday. Froebel entered school on Monday; the passage for the week was, "Seek ye first the kingdom of God." "I heard these words," he says, "repeated every day in a quiet, earnest, somewhat sing-song, childish tone, now by one, now by the whole. The verse made an impression on me like nothing before or since. Indeed, this impression was so lively and deep, that to-day every word lives freshly in my memory with the peculiar accent with which it was spoken; and yet since that time nearly forty years have elapsed. Perhaps the simple child's soul felt in these words the source and salvation of his life. Indeed, that conviction became to the struggling, striving man a source of inexhaustible courage, of always unimpaired joy, and willingness in self-consecration. Enough to say, my entrance into this school was for me the birth to a higher spiritual life."

Froebel's local surroundings tended to bring him into sympathy with Nature. The woods possessed a charm for him; and in hours of leisure he loved to steal away to loiter by babbling brooks, to gather flowers, to listen to the songs of birds, to watch the movements of animals, and to catch the sighing of winds through the trees. His father's house was closely hemmed in by other buildings. "I was thus deprived," he says, "of a distant view; only above me I saw the clear sky of the mountain-region, and felt around me the pure fresh air. The impression which this clear sky and this pure air made upon me has continuously remained present with me. My observation was truly directed on what was near me in Nature; the plant and flower world became,

so far as I could see and touch it, an object of my contemplation and thought."

At ten years of age he went to live with an uncle, whose home was pervaded with a spirit of kindness and benevolence. To a boy of warm, generous nature, who had been accustomed only to austerity under the parental roof, this was peculiarly grateful. He developed bodily strength; his sympathy with Nature became more profound and intelligent, and the warmth of his religious life amounted at times to enthusiasm. He entered the town school of Stadt-Ilm, where his uncle lived. The teacher, "a regular driller of the old, time-honored stamp, had not the slightest conception of the inner nature of his pupil," says Payne, "and seems to have taken no pains whatever to discover it. He pronounced the boy to be idle (which, from his point of view, was quite true) and lazy (which certainly was not true)—a boy, in short, you could do nothing with. And, in fact, the teacher did nothing with his pupil, never once touched the chords of his inner being, or brought out the music they were fitted, under different handling, to produce. Froebel was indeed, at that time, a thoughtful, dreamy child, a very indifferent student of books, cordially hating the formal lessons with which he was crammed, and never so happy as when left alone with his great teacher in the woods."

At the age of fifteen he became a forester's apprentice. This man, though possessed of extensive knowledge, was too busy to give his *protégé* the promised instruction. Thrown upon his own resources, Froebel did the best he could with the forester's books in teaching himself. From a physician in a neighboring town he

borrowed botanical books, by means of which he enlarged his acquaintance with the vegetable kingdom. "I used the long time of the forester's absence," he says, "during which I was left entirely to myself, for drawing a kind of map of the district in which I lived; botany, however, busied me chiefly. My church religion changed into a religious life in Nature, and in the last half-year I lived entirely in and with plants, which attracted me wonderfully, without, however, the meaning of the inner life of the plant-world yet dawning on me. The collecting and drying of plants I carried on with the greatest zeal. This time, in manifold ways, was devoted to my self-education, self information, and elevation."

In 1799 Froebel entered the University of Jena, where he attended lectures on mathematics, botany, natural history, physics, chemistry, the science of finance, forest matters, and architecture. "In botany," he says, "I had a sensible, loving, and benevolent teacher. Through him my insight into Nature was essentially quickened, and my love for observing it made more active. I shall always think of this man with gratitude." Having loaned a part of his means to his brother, Froebel became involved in debt at the university; and, being unable for a time to make payment, he suffered imprisonment for nine weeks, obtaining his freedom in the summer of 1801.

The next several years were spent in various employments without yielding him either much profit or peace of mind. He had not yet found the sphere for which Nature had fitted him. In 1805 we find him in Frankfurt with an architect; but, failing to see clearly how he

could accomplish anything through architecture for the ennobling of man, his position did not give him satisfaction. At length the turning-point in his life came. One day Gruner, the principal of a model school, just established at Frankfort, said to him: "Give up architecture; it is not for you. Become an educator. We need a teacher in our school. Make up your mind, and you shall have the place." After some hesitation he accepted the position; and the ecstasy he felt, as he stood for the first time in the presence of the school, convinced him that he had found his place. To use his own expression, "The fish was in the water."

In 1808 he went to Yverdun, and spent two years with Pestalozzi. He took with him three pupils, of whom he had charge as tutor. "Thus it happened," he says, "that I was there both as teacher and scholar, educator and pupil. In order to be fully and perfectly placed in the midst and heart of Pestalozzi's work, I wished to reside with my pupils in the building of the institution, in the castle so called. We wished to share everything with the rest; but this wish was not granted us, for strange selfishness interfered. Yet I soon came to dwell as near the institution as possible, so that we shared dinner, afternoon lunch, and supper, the instruction adapted to us, and the whole life of the pupils. I for myself had nothing more serious to do than to allow my pupils to take a full share of that life, strengthening spirit and body. With this aim we shared all instruction, and it was a special care to me to talk with Pestalozzi on every subject from its first point of connection, to learn to know it from its foundation." He thus became thoroughly acquainted with Pestalozzi's system,

which in its essential features he cordially adopted, but which he also supplemented and improved.

Afterward feeling the necessity of increasing his store of knowledge, he studied at the Universities of Göttingen and Berlin. In 1813 he joined the Prussian army, and took an active part in the campaign against Napoleon. After the close of the war he established a school at Keilhau, in which he followed "the principle of cultivating the self-activity of the pupil by connecting manual labor with every study." But after a varied experience, extending through fifteen years, the conviction fixed itself upon him that a change in the earliest methods of instruction was necessary to a thorough educational reform. This brings us to the *Kindergarten*, upon which the fame of Froebel chiefly rests.

Carefully considering the ways of children, Froebel saw that they delight in movement; that they use their senses; that they observe; that they invent and construct. All this activity he proposed to turn to account in the interest of education. He said: "I can convert children's activities, energies, amusements, occupations, all that goes by the name of play, into instruments for my purpose, and therefore transform play into work. This work will be education in the true sense of the term. The conception of it as such I have gained from the children themselves. They have taught me how I am to teach them."

The Kindergarten is a school which receives children at a very early age, and by systematizing their plays, directing their activity, and giving order to their ideas, develops their faculties harmoniously, and prepares them for the work of the ordinary school. The object of the

Kindergarten, as expressed by Froebel himself, is as follows: "It shall receive children before the usual school age, give them employment suited to their nature, strengthen their bodies, exercise their senses, employ the waking mind, make them acquainted judiciously with Nature and society, cultivate especially the heart and temper, and lead them to the foundation of all living—to unity with themselves."

The physical nature of the child is developed by calisthenic exercises; its social instincts are strengthened by association with companions in amusements and work; its senses are cultivated by means of playthings, called gifts, such as balls, cylinders, cones, variously dissected cubes, quadrilateral and triangular tablets, sticks, and mats for weaving; and its mind is exercised by the imitative or inventive uses it is taught to make of these objects.

The effects of the Kindergarten training have been thus summed up by an English lecturer: "What the Kindergarten has to show are happy, healthy, good-natured children; no proficiency in learning of any kind, no precocity; but just children in their normal state. The Kindergarten rejects reading, writing, ciphering, spelling. In it children under six build, plait, fold, model, sing, act; in short, they learn in *play* to work, to construct, to invent, to relate and speak correctly, and what is best of all—to love each other, to be kind to each other, to help each other."

It is interesting to look behind a great work to discover the spirit of the author, and it is also important to examine the principles upon which it rests. Froebel, like his illustrious master, Pestalozzi, was animated by a

profound love for humanity. This gave to his endeavors an exalted character. "The fame of knowledge," it was said over his grave, "was not his ambition. Glowing love for mankind, for the people, left him neither rest nor quiet. After he had offered his life for his native land in the wars of freedom, he turned with the same enthusiasm which surrenders and sacrifices for the highest thought, to the aim of cultivating the people and youth, founded the celebrated institution at Keilhau among his native mountains, and talked and planted in the domain of men's hearts. And how many brave men he has educated, who honor his memory and bless his name!"

Froebel accepted the great body of Pestalozzi's educational principles. He held that education is a harmonious development of the human faculties; that its principles are to be found in a study of Nature; that development depends upon the self-activity of the learner; and that observation is the basis of knowledge. In reference to education as a development, he says with vehemence: "All that does not grow out of one's inner being, all that is not one's own original feeling and thought, or at least awakens that, oppresses and defaces the individuality of man instead of calling it forth, and Nature becomes thereby a caricature. Shall we never cease to stamp human nature, even in childhood, like coins, to overlay it with foreign images and foreign superscriptions instead of letting it develop itself and grow into form according to the law of life planted in it by God the Father, so that it may be able to bear the stamp of the Divine, and become an image of God? For hundreds of years we Germans especially, through

imitation of foreign nations, have worn these fetters, which do not allow the deepest nature of the people or of individuals to move and unfold freely."

In several points, however, Froebel has supplemented the principles of Pestalozzi. He recognized the impracticability of the domestic training for early childhood which Pestalozzi so warmly advocated. Most mothers have neither the time nor qualifications to give this training. And, appreciating the importance of it, Froebel devised the Kindergarten, which supplies a veritable want in education.

He further placed more emphasis on the productive self-activity of the child than Pestalozzi did. All knowledge gained is utilized at once in some form of productiveness. In the language of Dr. W. N. Hailman: "Every new intuition is to be used in new forms of expression, and to be combined in every possible manner with previous acquisitions, in more and more complicated, more and more directly useful productions. He keeps the learner ever busy, imitating and inventing with the ever-increasing stock of knowledge; and ever increasing the stock of ideas with the aid of imitations and inventions."

Froebel was also the first to appreciate fully the value of women as educators. In many respects women are better fitted for instructing children than men are. They have greater tenderness, a deeper sympathy, a keener perception, greater adaptability to childish ways, and at the same time they are more graceful and winning. "The destiny of nations," Froebel often repeated, "lies far more in the hands of women—the mothers—than in the possessors of power, or of those innovators

who for the most part do not understand themselves. We must cultivate women, who are the educators of the human race, else the new generation can not accomplish its task." He regarded women as his natural allies in his educational reforms, and to his appeals they have responded nobly. It is chiefly through their agency that his reforms have been promoted in both America and Europe. Fortunate is the cause that enlists the hearty interest and support of women !

The leading ideas in Froebel's educational system have been summed up as follows :

"1. The task of education is to assist natural development toward its destined end. As the child's development begins with its first breath, so must its education also.

"2. As the beginning gives a bias to the whole after-development, so the early beginnings of education are of most importance.

"3. The spiritual and physical development do not go on separately in childhood; but the two are closely bound up with each other.

"4. Early education must deal directly with the physical development, and influence the spiritual development through the exercise of the senses.

"5. The right mode of procedure in the exercise of these organs is indicated by nature in the utterances of the child's instincts, and through these alone can a natural basis of education be found.

"6. The instincts of the child, as a being destined to become reasonable, express not only physical but also spiritual wants. Education has to satisfy both.

"7. The development of the limbs by means of

movement is the first that takes place, and therefore claims our first attention.

"8. Physical impressions are at the beginning of life the only possible medium for awakening the child's soul. These impressions should, therefore, be regulated as systematically as is the care of the body, and not be left to chance."

Froebel died June 21, 1852. "Like all self-educated persons," says a biographer, "he was deficient in logical clearness, especially in writing, when a flood of ideas overwhelmed him; as a practical teacher, he was wonderfully impressive and clear. Awkward in appearance, indifferent to the conventionalities of life, and always filled with one interest, one range of ideas and efforts, he nevertheless exerted on all genuine educators who came in contact with him, irrespective of creed, station in life, or party, an almost magical influence. Although a devout Christian and religionist, he was entirely unsectarian; although a revolutionary thinker in most respects, he kept free from all attempts at practical revolution; although a cosmopolitan and lover of mankind, he was an ardent national German; and, although in theory he was most uncritical, in speech incoherent and hardly intelligible, his system of methods for the development of the mind is eminently practical, systematic, and effective."

(C.) CONTEMPORARY EDUCATION.

There can be no doubt that education is now receiving far more attention than at any period in the past, and that it is rapidly becoming universal. Since the American and the French Revolution, the masses of the

people in all Christian lands have been rising in importance. Popular intelligence is everywhere reckoned an element of national power and wealth, and the stability of republics is recognized as resting upon the knowledge and virtue of the people. The worth of woman is appreciated now as never before. No longer held in the base subjection of heathen countries, and excluded from the blessings of culture, she now enjoys, in all enlightened nations, excellent facilities for education. Her sphere is growing larger; her education goes beyond a narrow circle of dainty accomplishments; and with cultivated mind she takes a place of wide influence in society, and stands by her husband as his friend, his counselor, and his equal.

No civilized nation now fails to make provision, to a greater or less degree, for the instruction of the people. Even the unprogressive nations of the Orient are affected by the Christian education of the West. China, with its strange conservatism, is relaxing its former rigor against foreign institutions. Many schools have been established by Christian missionaries, especially of the Catholic Church; and, besides a workshop at Shanghai, and a polytechnic school in the province of Futschien conducted by foreign teachers, a university on the European plan was opened at Peking in 1868 under imperial patronage. Japan has been thoroughly modernized in education. Since 1872 that country has had a comprehensive school system, including primary schools, academies, normal schools, colleges, and universities. These schools, modeled chiefly after those of America, are supplied with modern furniture and apparatus, and are conducted upon scientific methods. Both

sexes have the same educational advantages up to the normal school. The courses of instruction are substantially the same as in schools of corresponding grade in Europe and America, save that English and other modern languages take the place of Latin and Greek. India is gradually receiving at the hands of England an educational system extending from elementary schools to colleges and universities. Public instruction now forms a department of the government, and a network of schools is being extended by degrees over the whole country. Some institutions are entirely supported by the government, while others, established by local effort or missionary zeal, receive grants in aid. In the elementary schools, the vernacular is chiefly employed, but in the secondary schools English is taught and used in daily intercourse. Female education has but made a beginning. In 1882 the total number of educational institutions of all sorts in British India was 112,218, attended by an aggregate of 2,643,978 pupils, showing an average of one school to every twelve square miles, and ten pupils to every thousand of the population. In the same year the total expenditure upon education by the government was about \$6,440,000. Persia and Egypt, though languishing under Mohammedan rule, have to some extent imported European educational ideas.

But it is in Europe and America that the tendencies toward universal education have manifested themselves most fully, and accomplished the greatest results. Though as a rule Catholic countries have lagged behind, every Christian nation now provides with tolerable completeness for popular instruction. Greece and Italy have adopted in the present century systems of education

more comprehensive and useful than were ever contemplated by Plato and Quintilian. Germany, France, Belgium, Denmark, Norway, Sweden, Spain, Portugal—all have at present some system of popular education; and most of them have adopted the system of compulsory attendance. During the past two decades England has shown great interest in popular education, and granted annually, in connection with a system of thorough inspection, ever-increasing subsidies to public schools. The educational systems of several of these countries will be considered more in detail.

(D.) GERMANY.

In no country has education received more attention, or produced, upon the whole, better results, than in Germany. Though in subjection to the social conditions belonging to a monarchical form of government, the German system embodies many points of excellence. In the science and history of education, the Germans are in the lead. The principles of Pestalozzi, which found able advocates in all parts of Germany, have permeated the primary schools, and given a great impulse to the professional training of teachers. Teaching is recognized as a profession; and no one, who has not received special training and passed a satisfactory examination, is allowed to teach in either public or private schools. As a result of this rigorous system, Germany has a body of teachers admirably qualified for their work.

The existing interest in primary education in Germany dates from the opening of the present century. Humiliated by the wars of Napoleon, Germany felt the necessity of developing greater internal strength. Fred-

erick William III. addressed the following wise words to the German people: "We have indeed lost in territory, and fallen in external power and splendor, but we must see to it that we gain in internal power and splendor; and hence it is my earnest desire that the greatest attention be given to the instruction of the people." He was nobly seconded by able ministers, and the present educational system, in its essential features, was devised.

Education is an interest wholly in the hands of the government. The general supervision of educational affairs is intrusted to a Minister of Public Instruction, who is assisted by school boards in the several provinces, regencies, and districts of the state. The course of study, the text-books used, the methods of instruction, the examination and appointment of teachers, the supervision of the schools—everything is directly or indirectly under the control of the general government. The school-buildings, many of which were constructed for other purposes during the last century, are generally massive structures of stone or brick. Defective in ventilation and light, and furnished only with plain and often uncomfortable desks, these buildings are not models of school-architecture. The schools are well supplied with maps, charts, globes, and other apparatus, which the teacher employs judiciously in giving instruction.

The educational system of Germany embraces, under various names, three grades of schools, all of which have received a high degree of development. The primary schools (*Volksschulen*), which are brought within reach of the whole population, give instruction in religion (catechism and Bible history), reading, writing, arith-

metic, geography, natural history, singing, and gymnastics. The instruction, which is imparted in accordance with recent scientific methods, is very thorough. All children are required to enter school at seven years of age, and to continue their attendance till fourteen, at which time they are usually confirmed as members of the state Church. Through the successful enforcement of the compulsory system, the percentage of illiteracy is lower in Germany than in any other country of Europe. In 1872 the number of illiterates in the army was 4.6 per cent, and in the navy 2.3 per cent, while the corresponding numbers in France were 23 and 14 per cent. In Saxony, Thuringia, Baden, and some other portions of Germany, the illiterates among the recruits do not amount to one per cent; and out of six thousand recruits in Würtemberg there was only one that could not read. Primary instruction is much better among the Protestants than among the Catholics.

Secondary instruction is given in the gymnasia and the real-schools. The gymnasia, which give great prominence to Latin and Greek, are designed to prepare students for the university and the professions. The real-schools, which attach importance to the mother-tongue, mathematics, natural sciences, and modern languages, aim to fit their students for the ordinary business callings of life. As the gymnasia are humanistic and the real-schools practical, they have been the occasion of a warm conflict between educators of these two tendencies. The conflict is still going on; but meanwhile, in accordance with the practical spirit of the age, the real-schools have been constantly increasing in number and popularity. The studies in these two classes of

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schools vary somewhat in different parts of Germany ; but the courses pursued at present in the Prussian gymnasias and real-schools are fairly representative :

PRUSSIAN GYMNASIUM.

STUDIES.	Sexta.	Quinta.	Quarta.	Unter-Tertia.	Ober-Tertia.	Unter-Secunda.	Ober-Secunda.	Unter-Prima.	Ober-Prima.	Total.
Religion	3	2	2	2	2	2	2	2	2	19
German	3	2	2	2	2	2	2	3	3	21
Latin	9	9	9	9	9	8	8	8	8	77
Greek .....	..	..	..	7	7	7	7	6	6	40
French .....	..	4	5	2	2	2	2	2	2	21
History and geography.....	3	3	4	3	3	3	3	3	3	28
Mathematics	4	4	4	3	3	4	4	4	4	34
Natural history	2	2	2	2	2	..	..	..	..	10
Physics .....	..	..	..	..	..	2	2	2	2	8
Writing	2	2	..	..	..	..	..	..	..	4
Drawing	2	2	2	..	..	..	..	..	..	6
Hours per week	28	30	30	30	30	30	30	30	30	..

PRUSSIAN REAL-SCHOOL.

STUDIES.	Sexta.	Quinta.	Quarta.	Unter-Tertia.	Ober-Tertia.	Unter-Secunda.	Ober-Secunda.	Unter-Prima.	Ober-Prima.	Total.
Religion	3	2	2	2	2	2	2	2	2	19
German	3	3	3	3	3	3	3	3	3	27
Latin	8	7	7	6	6	5	5	5	5	54
English .....	..	..	..	4	4	3	3	3	3	20
French .....	..	5	5	4	4	4	4	4	4	34
History and geography.....	3	3	4	4	4	3	3	3	3	30
Mathematics	5	4	5	5	5	5	5	5	5	44
Natural history	2	2	2	2	2	2	..	..	..	12
Physics .....	..	..	..	..	..	3	3	3	3	12
Chemistry .....	..	..	..	..	..	..	2	2	2	6
Writing	2	2	..	..	..	..	..	..	..	4
Drawing	2	2	2	2	2	2	2	2	2	18
Hours per week	28	30	30	32	32	32	32	32	32	..

The course of instruction in both the gymnasias and

the real-schools extends through nine years Pupils enter at nine years of age, and complete the course at eighteen or nineteen; but many give up their studies at fourteen. As a rule, they do not room or board in the school-buildings; and, when coming from a distance, they are placed under the care of some trustworthy resident of the town or city, who watches over their studies and conduct out of school hours. The secondary schools charge a tuition fee, which varies from about five dollars to twenty-seven dollars, according to class.

The normal schools of Germany are excellent. The higher education of woman is left chiefly to private institutions. Though the courses of study vary considerably, the following curriculum of the Royal Augusta School for young ladies in Berlin will serve to indicate the general range of instruction. The prominence given to the mother-tongue is especially commendable:

STUDIES.	Classes and number of hours per week.							
	VIII.	VII.	VI.	V.	IV.	III.	II.	I.
Religion.....	3	3	3	4	2	2	2	2
German.....	12	9	7	6	6	6	6	6
French.....	..	2	3	4	6	6	6	6
English.....	..	..	..	..	..	..	2	2
Arithmetic.....	4	4	4	4	2	2	2	2
Geography.....	..	..	..	2	2	2	2	2
History.....	..	..	..	..	2	2	2	2
Natural sciences.....	..	..	..	..	..	2	2	2
Penmanship.....	3	4	2	2	2	..	..	..
Drawing.....	..	..	..	2	2	2	2	2
Vocal music.....	..	..	2	2	2	2	2	2
Needle-work.....	4	4	4	4	4	4	4	4
Total.....	26	26	25	30	30	30	32	32

The universities, both for comprehensiveness and thoroughness of instruction, stand pre-eminent. Their large number is due mainly to the former subdivisions of Germany into separate states, each of which was ambitious to maintain an institution for superior instruction. Many of the universities possess a considerable endowment; but most of them receive large subsidies from the state. The studies are ranged under the four faculties of theology, law, medicine, and philosophy, the latter comprising, besides philosophy proper, natural science, mathematics, political economy, history, geography, literature, and philology. A rector, elected annually by the professors, is charged with the administration of the affairs of the university. German students can not become full members without having completed the course of a gymnasium or real-school. The universities founded during the present century are as follows: Berlin, 1810; Munich, 1826; Breslau, 1811; Bonn, 1818; and Strasburg, 1872. The University of Berlin is the largest, with a faculty of two hundred and fifteen professors, and a yearly attendance of about five thousand students.

(E.) FRANCE.

The interest in popular education in France dates from the Revolution of 1789. The leaders of that movement were inspired with democratic ideas, and at the same time they believed that popular intelligence was necessary for the perpetuity of the republic. Hence, the Convention in 1793 not only ordered the establishment of elementary schools throughout France, but also made

attendance upon them compulsory. But discord at home and wars abroad, during the years immediately succeeding, prevented the execution of this wise decree.

Having crowned himself emperor, Napoleon did not remain indifferent to the subject of general education. In 1806 he established a system of great compactness, which forms the basis of the excellent laws now in operation. He united all the teaching forces of the country into one body, which he called the University of France. This university, whose affairs were administered by a grand master, assisted by a university council, was divided into three branches: Primary instruction, provided in the elementary schools; secondary instruction, provided in the lyceums and colleges; and superior instruction, given by the faculties of arts, medicine, law, and theology. France was divided into a number of large districts called academies, which were presided over by a rector, assisted by an academic council. Schools under local supervision were to be established in each community. But Napoleon became too much absorbed in ambitious schemes of conquest to put his system into complete operation.

Under the Restoration, popular education languished. Though the system of Napoleon was retained in its essential features, it was administered with a narrow sectarian and monarchical spirit. Under the cover of zeal for moral and religious instruction, education was placed in large measure in the hands of priests. A priest, M. de Freyssinous, was called to the office of grand master of the university. In a circular announcing his appointment, he sets forth the principles directing his adminis-

tration: "In calling to the head of public education a man invested with a sacred character, his Majesty declares to all France how much he desires that the youth of his kingdom be brought up in religious and monarchical sentiments. . . . The true Frenchman never separates love of his king from love of his country, nor obedience to magistrates from attachment to the laws and institutions which the king has given his people." While Germany was making vigorous efforts to retrieve its fortune through the intellectual development of its people, France, in the hands of a reactionary government, saw its educational progress effectually thwarted.

With the government of Louis Philippe after the Revolution of 1830, there came a change for the better. The system of Napoleon, as transmitted from the government of the Restoration, was administered with a vigorous and progressive spirit. The schools were emancipated from priestly control. Each district or commune was required to have a school, and, in order that qualified teachers might not be wanting, normal schools were encouraged and multiplied. School-houses were erected; scientific methods of instruction were introduced; an educational interest was awakened among the people. The basis of popular education was firmly established. For the encouragement of primary teachers in their unappreciated labors, Guizot, as Minister of Public Instruction, addressed them the following beautiful words: "I know full well that the care of the law will never succeed in rendering the simple profession of district teacher as attractive as it is useful. Society can not make a sufficient return to him who is devoted to

this work. There is no fortune to be won, there is scarcely a reputation to be acquired in the discharge of his onerous duties. Destined to see his life pass away in monotonous toil, sometimes even to encounter the injustice and ingratitude of ignorance, he would become disheartened, and perhaps succumb, if he did not draw his strength and courage elsewhere than in the prospect of an immediate and purely personal interest. It is necessary that he be sustained and animated by a profound sense of the moral importance of his labors; that the austere pleasure of having served men and contributed secretly to the public weal become the worthy reward which his conscience alone gives him. It is his glory to pretend to nothing beyond his obscure and laborious condition; to exhaust his strength in sacrifices scarcely noticed by those who profit by them; in a word, to labor for men, and expect his reward from God alone."

Under the second republic, the school laws were subjected, in 1850, to a comprehensive revision which, with recent minor modifications, resulted in the system now in force. There is a graduated and thorough system of superintendence. The highest educational authority is the Superior Council, which is presided over by the Minister of Public Instruction. The eighty-seven departments or counties of France are divided into seventeen districts, or academies, in each of which an academic council, under the direction of the Minister of Public Instruction, has charge of educational affairs. In each department or county there is another council composed of the prefect, the inspector of the academy, the inspector of primary instruction, and several others;

while in each canton or commune a local board, with the mayor at its head, has supervision over all the schools, both public and private. Each commune of five hundred inhabitants is required to have a public school in which the following subjects are taught: Moral and civil duties, reading, writing, the elements of the French language and literature, history and geography (particularly of France), arithmetic, the elements of natural science and its applications, the principles of designing, modeling, and music, gymnastics, military exercises for boys, and needle-work for girls. The schools are entirely free, and in 1882 the instruction of children between the ages of seven and fourteen was made compulsory. Any Frenchman twenty-one years of age, who has passed a satisfactory examination, is allowed to teach. Each department is required to have two normal schools, one for male and one for female teachers, with a course of study extending through three years. Since the humiliating defeat of 1870-'71, the French Government has been making vigorous efforts to promote popular education; and in no other country has there been, during the last decade, such marked educational progress.

Secondary instruction is provided by the lyceums and communal colleges. Previous to 1852 the lyceums, which correspond to the German gymnasia, were exclusively literary, Latin and Greek being the chief subjects of instruction. Since that time they have undergone important changes which bring them into closer relation with the present age. The classes and studies of the lyceums are as follows:

PLAN OF STUDIES FOR LYCEUM.

STUDIES.	ELEMENTARY DIVISION.			GRAMMAR DIVISION.			SUPERIOR DIVISION.				Total.
	Preparatory.	Eighth Class.	Seventh Class.	Sixth Class.	Fifth Class.	Fourth Class.	Third Class.	Second Class.	Rhetoric.	Philosophy.	
French, nine years	10	10	8	3	3	3	3	4	5	...	49
Latin, seven years . . . . .	..	..	..	10	10	6	5	4	4	...	39½
Greek, five years . . . . .	..	..	..	..	..	6	5	5	4	} 1 }	20½
History and Geography, ten years	4	4	4	3	3	3	4	4	4	3	36
Mathematics and Science, ten years	4	4	4	3	4	3	3	3	5	9	42
English or German, ten years	4	4	4	3	3	2	3	3	3	1	30
Philosophy . . . . .	..	..	..	..	..	..	..	..	..	8	8
Drawing	2	2	2	2	2	2	2	2	2	2	20
Hours per week . . .	24	24	22	24	25	25	25	25	27	24	..

In the superior division a system of bifurcation has been introduced, one course giving prominence to the ancient languages, the other to mathematics and the natural sciences. The studies common to both courses are French, history, geography, German or English, and logic. The communal colleges, which greatly outnumber the lyceums, differ from them only in having less extended curricula.

Superior instruction is given by the five faculties of theology, law, medicine, philosophy, and science. They are not united in one body, as is the case in the universities of Germany and the United States, but maintain a separate existence. The faculties of theology are established at Paris, Aix, Bordeaux, Lyons, Rouen, Montauban; those of law at Paris, Toulouse, Aix, Caen, Dijon, Poitiers, Rheims, Bordeaux, Grenoble, Douai, Nancy; those of science at Paris, Besançon, Rennes, Caen, Bor-

deaux, Clermont, Poitiers, Dijon, Grenoble, Lille, Nancy, Lyons, Marseilles, Montpellier, Toulouse; and those of literature at Paris, Aix, Besançon, Bordeaux, Caen, Clermont, Dijon, Douai, Grenoble, Lyons, Montpellier, Poitiers, Rennes, Toulouse, Nancy. In addition to giving instruction, these faculties conduct examinations, and confer the degrees of bachelor, licentiate, and doctor.

(F.) ENGLAND.

In England popular education has made less progress than in any other Protestant country of Europe. The explanation of this fact is to be found in the conservative character of the people, and the aristocratic organization of society. It is only in recent years that the masses have become prominent. Hence, it has happened that, while popular education was left to individual effort and denominational zeal, the children of the wealthy and the noble have enjoyed the advantages of the great preparatory schools—Eton, Winchester, Westminster, St. Paul's, Merchant Taylors', Charterhouse, Harrow, Rugby, Shrewsbury, and Christ's Hospital.

These preparatory or endowed schools, which have been justly celebrated in English education, were founded, with three exceptions, in the sixteenth century. They are large boarding-schools, whose courses of study raise them to the rank of the French lyceum or the German gymnasium. In accordance with the conservative character of English institutions, it is but recently that these schools have been much affected by modern educational progress. At present they are losing their mediæval character before the pressure for reform; and

though Latin and Greek still remain the chief subjects of study, increasing attention is being paid to the mother-tongue, the natural sciences, and the modern languages. The methods of instruction are becoming less mechanical; and the principle of authority, which formerly repressed a spirit of independence, is now giving place to freedom of thought and investigation. Athletics are cultivated with great zeal. The system of fagging, which requires students of the lower classes to perform menial services for those of the upper classes, still exists. "The best friends of these schools," says Howard Staunton, "confess that they contain much that is pedantic, much that is puerile, much that is antiquated, much that is obsolete, much that is obstructive, and not a little that is barbarous; and that, like other English institutions, they are apt to confound stolidity with solidity. Let, then, abuses be removed, let absolute obscurantism cease, and let such improvements be adopted as commend themselves, not to superficial progress, but to the most exalted wisdom." In addition to these endowed schools, there are many other schools and colleges devoted to secondary instruction.

The Universities of Oxford and Cambridge, whose origin is lost in the darkness of the middle ages, are among the most celebrated in the world. They are similar in organization; Oxford comprising twenty-four separate colleges, and Cambridge seventeen. Each college has a separate organization of its own, presided over by a president, rector, or provost, while all are under a central or university government administered by a chancellor, in conjunction with a council elected by the several colleges. The universities are maintained by

munificent endowments, the gifts of benefactors and the founders of colleges. Candidates for graduation must reside in a college for three academic years; when, upon passing a satisfactory examination before the university examiners, they receive their degree. Oxford and Cambridge are both very conservative, and still merit in some degree the criticisms of Bacon and Milton. During the present century other institutions for superior instruction have been founded, chief among which is the University of London, created by royal charter in 1836.

Prior to the beginning of the present century, the education of the masses of England was almost entirely neglected. To Robert Raikes, the founder of the Sunday-school, belongs the honor of having first awakened an interest in popular education. This he did partly through his paper, the "Gloucester Journal," in which he maintained that ignorance was the principal source of vice among the people, and partly through his actual labors for the instruction of the neglected children of his town. His efforts led to the establishment of numerous Sunday-schools, which form the beginning of popular instruction. He died in 1811.

The labors of two other educators, following the efforts of Raikes, gave an additional impulse to popular instruction. These were Andrew Bell and Joseph Lancaster, who independently of each other invented the monitorial system of teaching. Bell, who was born at St. Andrews, Scotland, in 1753, went to India in 1787, where he was appointed superintendent of a school for the orphan children of British soldiers. Unable to procure suitable teachers, he fell upon the plan, sometimes

adopted in the native schools of India, of employing advanced pupils as instructors. As the plan succeeded beyond expectation, he published an account of it on his return to England, and in 1807 established in London a school in which the monitorial (or Madras) system was employed. The experiment was successful; and as many influential persons, especially among the clergy, became interested in the system, the National Society was formed in connection with the Church of England for the purpose of establishing schools throughout the British dominions. The work of this society, under the direction of Bell, was prosecuted with great vigor, and in less than a dozen years one thousand schools had been opened, with an attendance of more than two hundred thousand children.

This remarkable activity was due in part to the labors of Joseph Lancaster, a Quaker. Having established a school in London in 1798, he found it necessary to reduce his expenses; and, as a means of doing this, he hit upon the monitorial system which Bell had already employed at Madras. His school met with great popular favor, and soon numbered one thousand pupils. It was visited by the royal family, on which occasion the king said to Lancaster, "I wish that every child in my kingdom were able to read the Bible." In view of the popularity and success of the school, an association of Dissenters, known as the British and Foreign School Society, was organized for the promulgation of the system of Lancaster; and the rivalry between this and the National Society of the Established Church led to extraordinary efforts in founding popular schools.

It was not till 1818 that the English Government concerned itself about education. At that time a committee was appointed to inspect the public schools for the upper and middle classes, and report upon their condition. Many evils were exposed, and the way opened for subsequent reforms. The first annual grant for education was made in 1834. The movement toward popular education received a noteworthy impulse from the educational conference held in London in 1857 under the presidency of the Prince Consort. In 1858 a commission was appointed by Parliament to report upon the state of popular education. The interest thus manifested by the government in popular education culminated in 1870 in a statute which ordered that "there shall be provided for every school district a sufficient amount of accommodation in public elementary schools available for all the children resident in such district, for whose elementary education efficient and suitable provision is not otherwise made." School boards, elected by all tax-payers, including women, were established to carry out the provisions of this law; and they were further invested with authority to compel parents to send their children to school between the ages of five and thirteen. This new law has been very successful. A high percentage of attendance has been attained, and an able body of trained teachers provided; and the present educational progress of England will compare favorably with that of any other Protestant country.

(G.) THE UNITED STATES.

In the United States the sovereignty is vested, not in the few, but in the many. The masses are called

upon to consider every kind of social and political question affecting the welfare of the country. The principles of human liberty; schemes for internal improvement; questions of finance and education; our relations with other countries—these are some of the weighty matters brought before the popular mind. At the polls, where every man has an equal voice, the decisions are made, and the policy of the government determined.

These facts necessitate a considerable degree of popular intelligence. The illiterate, clearly incapable of performing the high duties imposed on American citizens, remain ciphers in society, or become the dangerous tools of designing politicians. In some form, popular education is necessary both to a wise administration of the government and to its perpetuity. "Promote," said Washington, in his Farewell Address, "as an object of primary importance, institutions for the general diffusion of knowledge. In proportion as the structure of a government gives force to public opinion, it is essential that public opinion should be enlightened."

The educational history of the United States naturally divides itself into the colonial and national periods. The New England and the Southern colonies present a striking difference in their educational development. This difference had its origin partly in the dissimilar character and antecedents of the colonists, and partly in the physical conditions of the two sections. In New England education early received attention, and produced excellent results; in the South it was neglected. As a result, the Southern colonies, in proportion to population and natural advantages, exhibited a slower devel-

opment, losing ground that has not yet been recovered. As was the case in Europe during the corresponding period, the theological influence in education was very strong; but, at the same time, the peculiar circumstances of establishing a home in an unsubdued wilderness, and of laying the foundation of a great republic, early gave the schools vigorous life and a practical bearing.

(1.) *Colonial Period.*

In Virginia popular education was almost wholly neglected during the colonial period. This was owing partly to the aristocratic spirit which existed in the colony from the beginning, and partly to the scattered condition of the population. While in New England the people naturally collected in towns, in Virginia the colonists, devoted to agriculture and seeking to reproduce the conditions of the mother-country, settled on large plantations. For half a century after the founding of Jamestown, schools were almost unknown. Education was confined to the parental roof, and successive generations grew up in comparative ignorance. Sir William Berkeley wrote in 1671: "I thank God there are no free schools nor printing, and I hope we shall not have these for a hundred years; for learning has brought disobedience, and heresy and sects into the world, and printing has divulged them and libels against the best government. God keep us from both!"

The apathy or hostility prevailing in regard to popular schools did not exist to the same degree in reference to the higher education. From an early date the question of establishing a college had been repeatedly discussed. Finally, after the lapse of more than three quarters of

a century from the time the subject was first broached, the College of William and Mary was founded in 1692. When the enterprise began to assume definite form, a commendable interest, both at home and in England, was manifested in its success. The Lieutenant-Governor headed the subscription-list with a generous gift, and his example was followed by other prominent members of the colony. The sum of twenty-five hundred pounds having been raised, the Rev. James Blair was sent to England to solicit a charter for the institution. This was readily granted; and, as an additional evidence of royal favor, the quit-rents yet due in the colony, amounting to nearly two thousand pounds, were turned over to the college. For its further support, twenty thousand acres of land were set apart, and a tax of a penny a pound was laid on all tobacco exported from Virginia and Maryland to other American colonies. The institution was located at Williamsburg, and the Rev. James Blair, who had been active in securing its establishment, was chosen as its first president. In the language of the charter, the college was founded "to the end that the Church of Virginia may be furnished with a seminary of ministers of the gospel, and that the youth may be piously educated in good letters and manners, and that the Christian faith may be propagated among the Western Indians to the glory of Almighty God." The course of study embraced divinity, language, and natural philosophy—"a divinity," says Howison, "shaped and molded at every point by the liturgy and creed of the English Church; languages which filled the college walls with boys hating Greek and Latin grammars; and natural philosophy, which was just beginning to believe that

the earth revolved round the sun, rather than the sun round the earth." Such was the founding of the next oldest American college, from whose walls have gone forth many able men influential in molding the destinies of our country.

The conditions in Virginia were not favorable to literary development. Descended in good part from noble families, the colonists brought with them the aristocratic feelings and religious intolerance characteristic of the royalists in England. The isolated condition of the population was unfavorable to the kindling of mind; the absence of schools and printing-presses lowered the tone of popular intelligence; the concentration of power and influence in the hands of an aristocracy of wealthy land-owners, occupied chiefly with pleasure and politics, was not suited to awaken a literary spirit. With few exceptions, the writers of the colonial period were born or educated abroad. Instead of literary men, Virginia produced sagacious politicians, impassioned orators, and elegant country gentlemen of boundless and gracious hospitality.

If the early colonists of Virginia were largely adventurers, seeking their fortune in the New World, the Puritans of New England, fleeing from religious oppression, came to establish a permanent home. A deep earnestness, which often ran into the extravagance of a forbidding asceticism, characterized their early history. They counted no sacrifice too great to maintain the integrity of their religious convictions. Giving up comfort, wealth, home, they faced the dangers of a winter sea and the inhospitality of a barren shore. They were intelligent and brave men, daring to think for them-

selves, and to maintain their convictions at any cost. Many of them had enjoyed the advantages of Oxford and Cambridge, and brought with them the precious seed of learning. They had some consciousness of their mission as the founders of a mighty people, and, with their eye turned to future generations, they laid the foundations broad and well. We may smile at their weaknesses, their superstition, and their austerity of life, but, underneath these peculiarities, we discover a strength of character, depth of conviction, and sincerity of purpose, that command our respect and admiration.

In view of these facts, it is not strange that education in Massachusetts received early attention. The action of the Puritans was prompt and vigorous. Within a few years after the landing of the Mayflower, when their number was yet small; when their homes were without comfort; when they were continually menaced by the scalping-knife of the savage, they established a system of schools that placed them in advance of the most enlightened portions of Europe. In 1636 the General Court voted an appropriation of four hundred pounds for the founding of a school, which, after its first private benefactor, the Rev. John Harvard, received the name of Harvard College. It was cheerfully and liberally sustained by the New England colonies. It was opened in 1638, and sent forth its first graduating class in 1642. The standard of scholarship was not low. The requirements for entrance, in 1643, were given as follows: "When any scholar is able to understand Tully, or such like classical author extempore, and make and speak true Latin in verse and prose; . . . and decline perfectly the paradigms of nouns and verbs in the Greek

tongue, let him then, and not before, be capable of admission into the college."

The most remarkable action, however, of the Massachusetts colony was in relation to common schools. In 1647 the General Court passed the following order, the preamble of which recalls the powerful words of Luther: "It being one chief project of the old deluder, Satan, to keep men from the knowledge of the Scriptures, as in former times by keeping them in an unknown tongue, so in these latter times by persuading from the use of tongues, that so at least the true sense and meaning of the original might be clouded by false glosses of saint-seeming deceivers; that learning may not be buried in the grave of our fathers in the Church and Commonwealth, the Lord assisting our endeavors—

"It is therefore *ordered*, that every township in this jurisdiction, after the Lord hath increased them to the number of fifty householders, shall then forthwith appoint one within their town to teach all such children as shall resort to him to write and read; whose wages shall be paid, either by the parents or masters of such children, or by the inhabitants in general, by way of supply, as the major part of those that order the prudentials of the town shall appoint; provided, those that send their children be not oppressed by paying much more than they can have them taught for in other towns; and it is further *ordered*, that when any town shall increase to the number of one hundred families or householders, they shall set up a grammar-school, the master thereof being able to instruct youth so far as they may be fitted for the university; provided, that if any town neglect the performance hereof above one year, that every such town

shall pay five pounds to the next school till they shall perform this order."

The other colonies of the North manifested the same interest in popular education shown by Massachusetts; those of the South, following the example of Virginia, left it to individual effort. A public school was established in Connecticut as early as 1639. The first code of laws for this colony, published in 1650, required "the selectmen of every town to have a vigilant eye over their brethren and neighbors, to see that none of them shall suffer so much barbarism in any of their families as not to endeavor to teach, by themselves or others, their children and apprentices so much learning as may enable them perfectly to read the English tongue." The colony of Rhode Island had a public school in 1640. By reason of their close political relations, Maine and New Hampshire had substantially the educational system of Massachusetts. The colonists of New Jersey were interested in schools from the beginning, though public action in reference to education was not taken till 1676. In that year the "town's men" of Newark were authorized to establish a school and employ a competent teacher for one year. The educational history of Pennsylvania is praiseworthy. The first plan of proprietary government, drawn up by Penn, in 1682, makes mention of public schools. In 1683, the year Philadelphia was founded, the council of the province ordered the establishment of a school. A charter granted by Penn, in 1711, contains the following preamble: "*Whereas*, the prosperity and welfare of any people depend, in a great measure, upon the good education of youth, and their early introduction in the principles of

true religion and virtue, and qualifying them to serve their country and themselves by breeding them in reading, writing, and learning of languages and useful arts and sciences, suitable to their sex, age, and degree—which can not be effected, in any manner, so well as by erecting PUBLIC SCHOOLS for the purpose aforesaid.” Maryland seems to have made no provision for public schools till 1723, when an act was passed “for the encouragement of learning, and erecting schools in the several counties of this province.” The Constitution of North Carolina, adopted in 1776, provided that “a school or schools shall be established by the Legislature for the convenient instruction of youth, with such salaries to the masters, paid by the public, as may enable them to instruct at low prices; and that all useful learning shall be encouraged in one or more universities.” No action was taken with reference to public schools till 1819. South Carolina and Georgia made no provision for popular education during the colonial period.

(2.) *National Period.*

When the independence of the United States had been achieved, and a Constitution adopted, education was left to the care of the separate States. Yet the most influential leaders in the formation of the new government were outspoken advocates of education, and interpreted that clause of the Constitution empowering Congress “to lay and collect taxes, . . . and provide for the common defense and general welfare of the United States,” as authorizing the General Government to encourage the establishment of schools. In a message to Congress, in 1790, Washington, after making sundry

other recommendations touching military organization, uniformity in currency, weights and measures, etc., continued: "Nor am I less persuaded that you will agree with me in opinion, that there is nothing which can better deserve your patronage than the promotion of science and literature. Knowledge is in every country the surest basis of public happiness. In one, in which the measures of government receive their impression so immediately from the sense of the community, as in ours, it is proportionably essential."

In his inaugural address, John Adams said: "The wisdom and generosity of the Legislature in making liberal appropriations in money for the benefit of schools, academies, and colleges, is an equal honor to them and their constituents; a proof of their veneration for letters and science, and a portent of great and lasting good to North and South America, and to the world. Great is truth—great is liberty—great is humanity—and they must and will prevail!"

Thomas Jefferson was a friend to popular education. "I look to the diffusion of light and education," he said, "as the resources most to be relied on for ameliorating the condition, promoting the virtue, and advancing the happiness of man. And I do hope, in the present spirit of extending to the great mass of mankind the blessings of instruction, I see a prospect of great advancement in the happiness of the human race, and this may proceed to an indefinite although not an infinite degree. A system of general instruction, which shall reach every description of our citizens, from the richest to the poorest, as it was the earliest, so it shall be the latest of all the public concerns in which I shall permit myself to

take an interest. Give it to us, in any shape, and receive for the inestimable boon the thanks of the young, and the blessings of the old, who are past all other services but prayers for the prosperity of their country, and blessings to those who promote it."

The establishment of a national university, to be located at the seat of General Government, was earnestly advocated by Washington. He repeatedly refers to the subject, not only in his official communications to Congress, but also in his private correspondence with Hamilton, Jefferson, and others. He conceived that such an institution would guard American youth from the dangers of education abroad, and have a tendency to banish local and State prejudices from the national councils. In his last will he bequeathed fifty shares in the Potomac Company "toward the endowment of a university to be established within the limits of the District of Columbia."

The plan of granting a certain portion of the public lands for educational purposes had its beginning in 1785. In the ordinance for the government of the Northwest Territory, the sixteenth section (one square mile) in every township was set apart for the maintenance of public schools. The principle governing this action was stated as follows: "Religion, morality, and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall be forever encouraged." Two years later an additional grant of two townships was made to each State for the support of a university. As this action was confirmed in 1789, after the adoption of the Federal Constitution, every State organized since that time has received, in

addition to the grant for common schools, at least two townships for the promotion of higher education. In 1848 the thirty-sixth section of each township was added to the sixteenth for the support of common schools. Special grants have been made at different times. The land granted by the General Government for educational purposes between 1785 and 1862 amounts to nearly 140,000,000 acres.

In the dark days of 1862 Congress was not unmindful of the material progress of the country. The need of a more practical education than that furnished by the ordinary classical college was felt. With the view of bringing education into closer relation with the mechanic arts and the agricultural development of our vast domain, Congress made a grant of land-scrip to the amount of 30,000 acres for each senator and representative for the establishment of what are known as agricultural colleges. The leading object of these colleges, as the bill stated, "should be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life." The amount of land thus donated to the several States was 9,510,000 acres. All of the States have accepted the grant; and, in accordance with the provisions of the act, they have either established independent institutions, or have connected an agricultural department with an existing college or university. Supplemented by State appropriations and in a few cases by individual munificence, this donation by Congress, though failing

to realize the expectations of its friends, has led to the establishment of some excellent institutions.

The Bureau of Education is an office in the Department of the Interior. It had its origin in the need of some central agency to collect, preserve, and distribute educational information. In 1866 a memorial emanating from the National Association of State and City School Superintendents was presented to the House of Representatives; and, substantially on the basis thus recommended, an act was passed March 2, 1867, establishing an agency "for the purpose of collecting such statistics and facts as shall show the condition and progress of education in the several States and Territories, and of diffusing such information respecting the organization and management of school systems and methods of teaching as shall aid the people of the United States in the establishment and maintenance of efficient school systems, and otherwise promote the cause of education." During its brief existence, the Bureau of Education has collected a large amount of valuable educational intelligence, which by means of annual reports and circulars of information it has widely disseminated.

By the Declaration of Independence the several colonies assumed the character of sovereign States. The States of the South continued to regard education, not as a public but as a private interest, to be left in the hands of parents or guardians. If here and there popular education found, as in the case of Jefferson, a strong advocate, it did not prevail. Primary education was supplied by means of subscription schools, which were maintained during the winter months in every com-

munity of sufficient population. For those unable to pay the cost of tuition, a public fund was provided. In the families of the wealthy, the custom of employing tutors generally prevailed. Private enterprise secured the establishment of numerous flourishing secondary schools, while denominational zeal multiplied the number of Christian colleges.

By destroying the system of slavery, and leading, in some measure, to a reorganization of society, the civil war has brought the Southern States into harmonious relations with the rest of the country. The South has broken away from hurtful traditions; it is rapidly developing its material resources; it is looking to the future with a confident hopefulness that gives vigor and courage to every effort. In no particular has the change been more remarkable and significant than in education. Since the war every Southern State has adopted a system of free public instruction which, in spite of poverty, prejudice, and the scattered condition of the population, has made surprising progress. Opposition has been hushed or overcome; interest in popular education is profound and general; political parties vie with one another in befriending the public schools; young teachers, filled with the spirit of educational progress, have come to the front. "The great work," says the Rev. A. D. Mayo, "has begun in earnest. Our Northern folk have no conception of the rapidly growing power of the educational movement in the South. It is polarizing political parties, shaking up religious sects, exciting the drawing-rooms, pulverizing 'bosses,' civil, ecclesiastical, and social."

The spirit of the North and the West found fitting

expression in the Constitution of Massachusetts, adopted in 1780. "Wisdom and knowledge," says this document, "as well as virtue, diffused generally among the body of the people, being necessary for the preservation of their rights and liberties; and as these depend on spreading the opportunities and advantages of education in the various parts of the country, and among the different orders of the people, it shall be the duty of legislators and magistrates, in all future periods of this Commonwealth, to cherish the interests of literature and the sciences, and all seminaries of them; especially the University of Cambridge, public schools, and grammar-schools in the towns; to encourage private societies and public institutions, rewards and immunities, for the promotion of agriculture, arts, sciences, commerce, trades, manufactures, and a natural history of the country; to countenance and inculcate the principles of humanity and general benevolence, public and private charity, industry and frugality, honesty and punctuality in their dealings; sincerity, good-humor, and all social affections and generous sentiments among the people."

Though differing in details, the system of popular instruction now adopted throughout the United States is everywhere substantially the same. It comprehends three grades of schools—the primary schools, in which reading, writing, arithmetic, geography, and English grammar are the principal subjects taught; the secondary schools, known as high-schools, graded schools, grammar-schools, and academies, in which the higher mathematics, foreign languages, history, and natural science are introduced; and the colleges and universities, in which the curricula embrace the studies necessary to

a liberal education and professional life. To these should be added the normal schools, which are designed to give teachers a scientific training for their vocation.

The primary schools and, for the most part, the secondary schools, are supported by a tax levied on all assessed property, together with the income derived from any permanent fund created by special State appropriation or grant by the national Government. Though many States have one or more institutions for superior instruction maintained by annual appropriations from the public treasury, the majority of our colleges and universities are the fruit of denominational zeal and individual munificence. The State, usually through a Board of Education or Superintendent of Public Instruction, exercises a general supervision over the public schools, while the details of management are committed to local officers, consisting of county superintendents and district committees.

A strong interest in education exists in every section of our country; and, under the impulsion of this feeling, every effort is made to advance the public schools. Neat and well-furnished school-houses are rapidly supplanting the log-huts and temporary make-shifts of the past; a better qualified class of teachers is being demanded by public sentiment; the various school officers are held more firmly to a faithful discharge of their duties; the school term is being lengthened; better courses of study and improved methods of teaching are being everywhere introduced. The French Commission to the Exposition of 1876 was correct in reporting that "the great zeal for the education of the young which grows as the population increases, penetrates into the

public mind more and more, and manifests itself in more and more decided ways. What may have seemed at first a transient glow of enthusiasm, a generous impulse, has in time assumed all the force of a logical conviction, or rather of a positive certainty. It is no longer a movement of a few philanthropists or of a few religious societies, but it is an essential part of the public administration for which the States, the cities, and townships appropriate every year more money than any other country in the world has hitherto devoted to the education of the people. Far from limiting this generosity as much as possible to primary instruction, it goes so far as to declare free for all not only primary but even secondary schools."

The subject of compulsory education has naturally elicited considerable attention, and at present educators are divided in their opinions. The opponents of the system say that it is essentially un-American; that it interferes with the rights of parents; that the difficulties of carrying it out are insuperable; and that its absence involves no danger to our institutions. The advocates of the system reply that ignorance is an evil which the State should remove; that the parent has no right to bring up his children in ignorance; that the State has a natural right to enact any laws that may be necessary for self-protection; and that the compulsory system, both in this country and in Europe, has produced beneficial results. The sentiment in favor of compulsory education seems to be growing. Connecticut, Massachusetts, Maine, Michigan, Texas, California, and New Jersey have adopted it, and in other States the subject is more or less discussed.

Another prominent educational question is the co-education of the sexes in our colleges and universities. In the primary schools and even in the secondary schools of this country, the young of both sexes have generally been educated together. Begun from considerations of economy and convenience, co-education is now continued in these schools from a strong conviction of its excellence. But that the same system should apply to superior education is stoutly denied. It is said that co-education in our higher institutions of learning endangers the health of young women; that it does not give them a training suited to their destiny in life; that it develops a strong-minded type of womanhood; that it lowers the grade of scholarship; that it leads to personal attachments and matrimonial engagements; and, lastly, that it gives rise to scandals. These arguments are chiefly theoretical, and hence it happens that they are met by a series of counter-statements. The advocates of co-education in our colleges, after a more or less extended observation of its workings, affirm that the system has not proved injurious to health; that it aims at individual development, which is the true end of education; that it makes young women more womanly, and young men more manly; that it raises the standard of scholarship, since female students usually maintain a better average than their male competitors; that if it sometimes leads to matrimonial engagements, these are formed under the most favorable circumstances; that it does not give rise to more scandals than otherwise occur; that it elevates the moral tone of a college, and renders discipline less difficult; and that, by bringing about a communion of sympathy and taste between man and

woman, it lays the foundation for greater domestic happiness. Whatever may be thought of the arguments on either side, it is certain that co-education is growing in popular favor. It is but a few years since the experiment was first tried, yet at present the system is adopted in nearly one third of our colleges and universities. Where it has been tried under favorable conditions, it has rarely failed, by its good results, to overcome prejudice and win popular favor.

Our college curricula are undergoing important modifications. The old course of study, consisting almost exclusively of Latin, Greek, and mathematics, has appeared to many not to be duly adjusted to the conditions of the present age. The growth of knowledge during the past two or three centuries has been very great. A large number of sciences, particularly those relating to Nature, have been added to the domain of learning. Modern nations have come into prominence, and produced literatures of incomparable worth. These facts have necessitated an enlargement of the college course. As President Eliot, of Harvard, has well said: "The general growth of knowledge, and the rise of new literatures, arts, and sciences during the past two hundred and fifty years, have made it necessary to define anew liberal education, and hence enlarge the signification of the degree of Bachelor of Arts, which is the customary evidence of a liberal education." The leading subjects that have thus acquired prominence are English, the natural sciences, and the modern languages; and, in order to make room for them, nearly all of our colleges have adopted parallel courses and the elective system. The process of adjustment which is now going on will,

no doubt, issue in courses of study well suited to the needs of our country.

(H.) CONCLUSION.

There can be little doubt that the educational world is in a period of rapid transition. Correct views of the nature and end of education are becoming prevalent; and, in order that educational methods may have a scientific basis, the physical and mental constitution of man is being subjected anew to careful investigation. The laws governing human development have been largely ascertained, and now give direction to our best teaching. The work of education is no longer left to novices destitute of any training except an acquaintance with the defective methods by which they were themselves instructed. Teaching is being elevated into a profession, for which intelligence and training are recognized as necessary. There is a breaking away from traditional views and customs. Human reason, unfettered by tradition or the dicta of authority, is everywhere proving all things, and holding fast only that which is good. The present is an age of experiment and investigation. Able minds in all Christian lands are engaged upon educational problems. While all this leaves the educational world in an unsettled condition, it promises well for the future. Within the past few decades truth has made large conquests in the domain of education. And, as we may well judge, both from the lessons of the past and the tendencies of the present, there will come forth from this struggle an education firmly established on a scientific basis, and better adjusted to the conditions of modern life.

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expression in the Constitution of Massachusetts, adopted in 1780. "Wisdom and knowledge," says this document, "as well as virtue, diffused generally among the body of the people, being necessary for the preservation of their rights and liberties; and as these depend on spreading the opportunities and advantages of education in the various parts of the country, and among the different orders of the people, it shall be the duty of legislators and magistrates, in all future periods of this Commonwealth, to cherish the interests of literature and the sciences, and all seminaries of them; especially the University of Cambridge, public schools, and grammar-schools in the towns; to encourage private societies and public institutions, rewards and immunities, for the promotion of agriculture, arts, sciences, commerce, trades, manufactures, and a natural history of the country; to countenance and inculcate the principles of humanity and general benevolence, public and private charity, industry and frugality, honesty and punctuality in their dealings; sincerity, good-humor, and all social affections and generous sentiments among the people."

Though differing in details, the system of popular instruction now adopted throughout the United States is everywhere substantially the same. It comprehends three grades of schools—the primary schools, in which reading, writing, arithmetic, geography, and English grammar are the principal subjects taught; the secondary schools, known as high-schools, graded schools, grammar-schools, and academies, in which the higher mathematics, foreign languages, history, and natural science are introduced; and the colleges and universities, in which the curricula embrace the studies necessary to

a liberal education and professional life. To these should be added the normal schools, which are designed to give teachers a scientific training for their vocation.

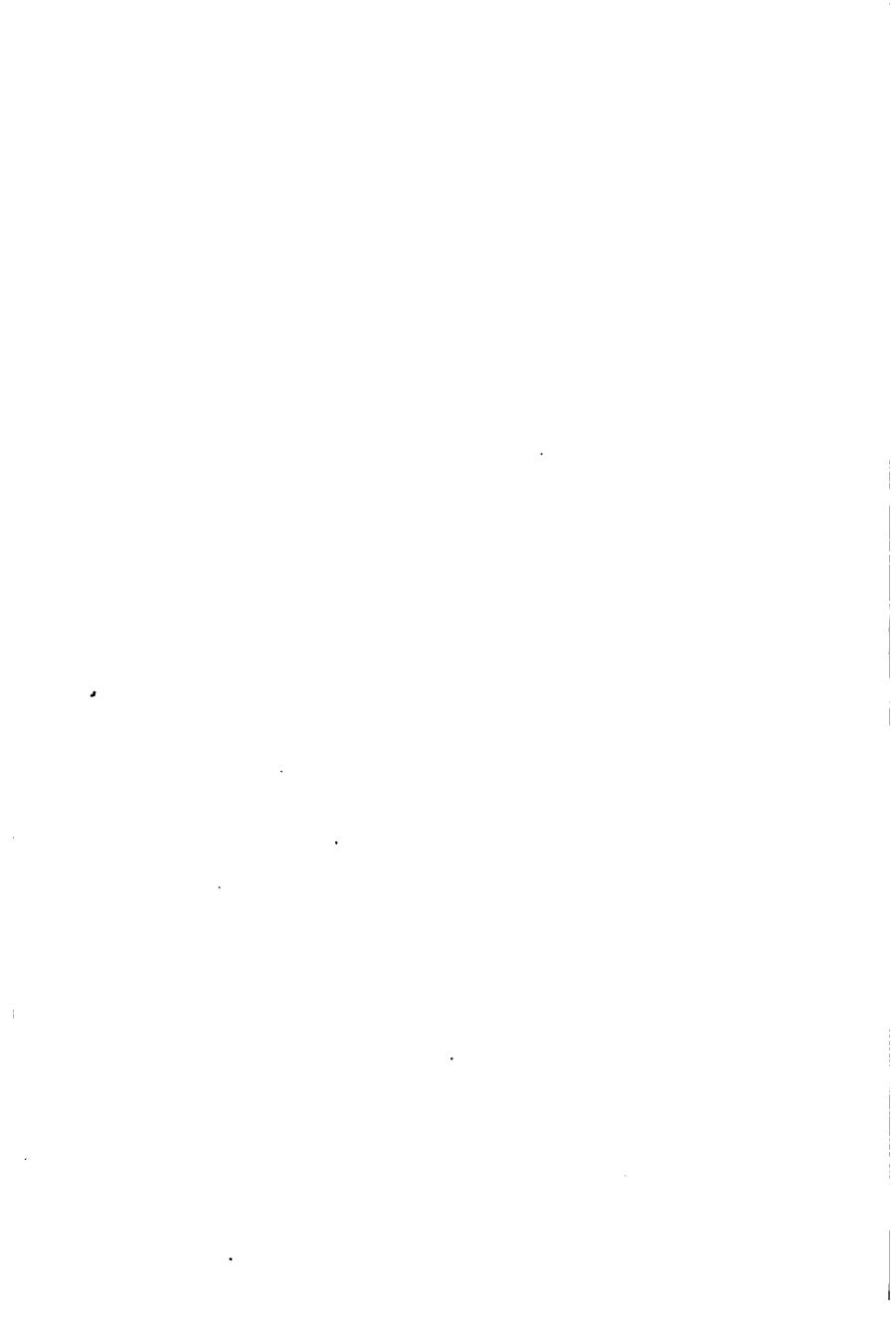
The primary schools and, for the most part, the secondary schools, are supported by a tax levied on all assessed property, together with the income derived from any permanent fund created by special State appropriation or grant by the national Government. Though many States have one or more institutions for superior instruction maintained by annual appropriations from the public treasury, the majority of our colleges and universities are the fruit of denominational zeal and individual munificence. The State, usually through a Board of Education or Superintendent of Public Instruction, exercises a general supervision over the public schools, while the details of management are committed to local officers, consisting of county superintendents and district committees.

A strong interest in education exists in every section of our country; and, under the impulsion of this feeling, every effort is made to advance the public schools. Neat and well-furnished school-houses are rapidly supplanting the log-huts and temporary make-shifts of the past; a better qualified class of teachers is being demanded by public sentiment; the various school officers are held more firmly to a faithful discharge of their duties; the school term is being lengthened; better courses of study and improved methods of teaching are being everywhere introduced. The French Commission to the Exposition of 1876 was correct in reporting that "the great zeal for the education of the young which grows as the population increases, penetrates into the

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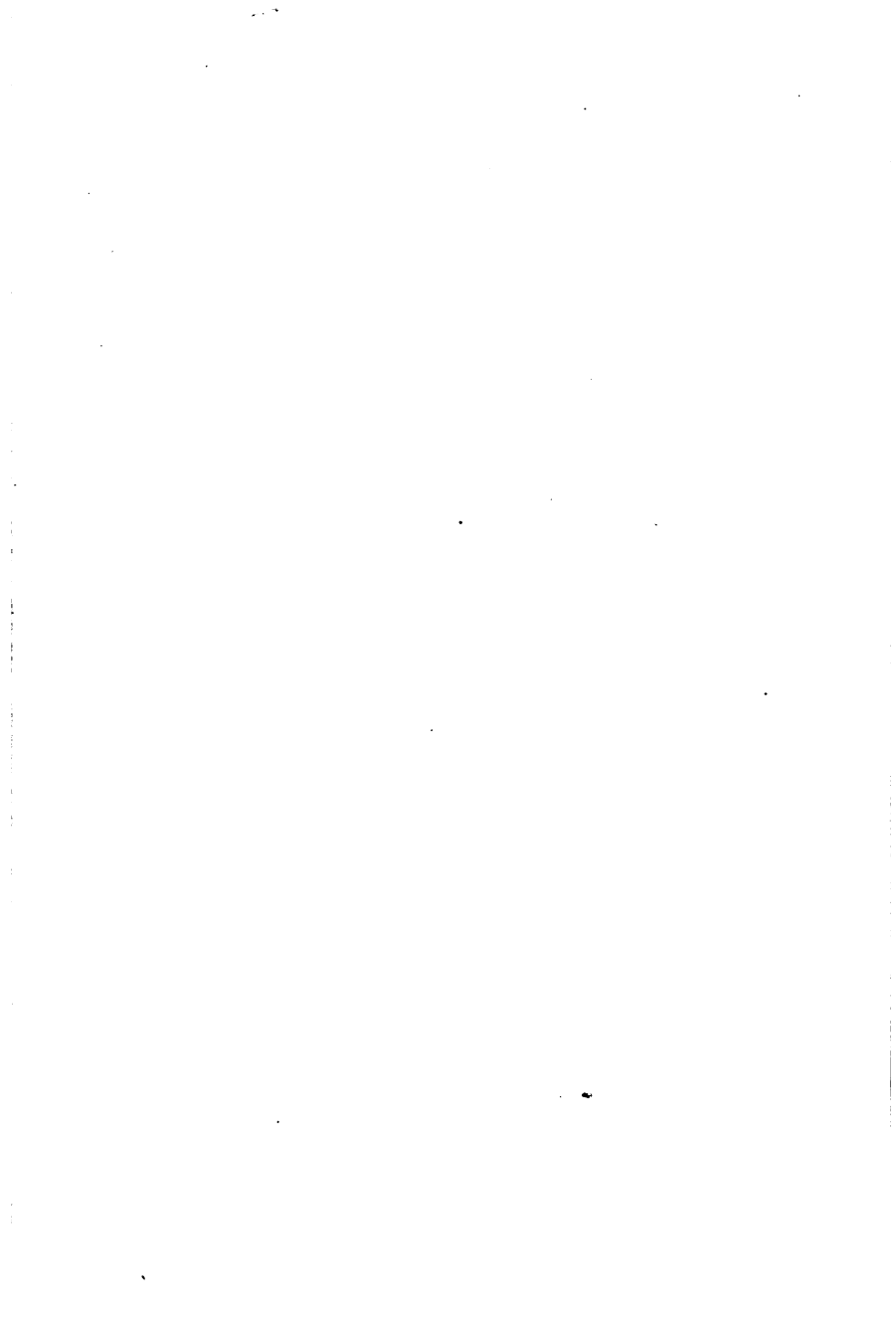
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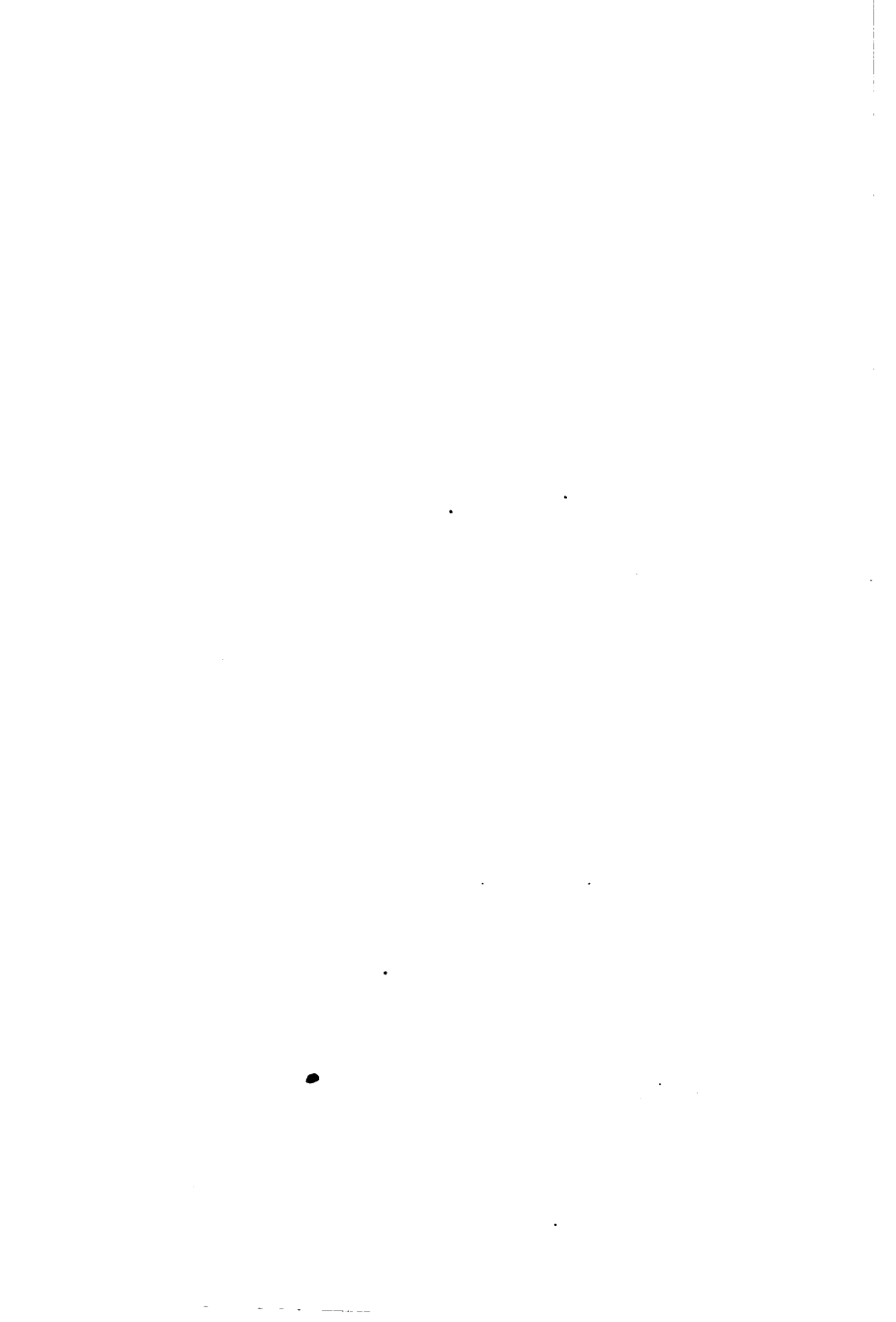
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